

**ENFORCEABLE STATE MECHANISMS
FOR THE CONTROL OF NONPOINT SOURCE
WATER POLLUTION**

Environmental Law Institute
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Executive Summary

This study examined the laws of the fifty states, Puerto Rico, and the District of Columbia to identify and analyze enforceable mechanisms for the control of nonpoint source water pollution. An enforceable mechanism consists of a *standard* applicable to an identified entity or entities; a *sanction* such as a civil, criminal, or administrative penalty, loss of a license, and performance of required remedial action, but not mere loss of an incentive; and a *process*, either explicit or implied, for applying the standard and imposing the sanction.

The study found many enforceable mechanisms in state law, and also found that there is great variability in such authorities. In the absence of any federal legislative or regulatory norm, the states have exhibited great diversity in their legislation.

Standards are often supplied by a mixture of agriculture laws, forestry laws, fish and game laws, nuisance prohibitions, general water pollution discharge prohibitions, land use planning and regulation laws, and criminal laws. Also, many state authorities are watershed-based, or targeted solely upon critical areas, buffers, or particular impaired waters. In addition, state laws also often delegate standard setting, implementation, or enforcement duties to units of local government or conservation districts.

Because of this great variation in approach, it is not possible to quantify nonpoint authorities or to classify them in mutually exclusive categories. Moreover, because these laws operate together, it is necessary to understand each state's entire program in order to assess its potential for using an enforceable mechanism to deal with particular conduct in a particular place. For example, a state may address in its forestry law conduct that is addressed in another state by a soil and water conservation district law. Or a state may address agricultural activities in riparian buffer zones or critical areas in ways that it does not address similar activities that are located at greater distances from identified waters, while another state imposes similar requirements across all agricultural lands.

Some general observations emerge from the study.

First, nearly all of the states have some general statutory authority to deal with nonpoint source discharges that can be shown to result in water pollution. These "general discharge prohibition" authorities come in different forms, but most are parts of states' water pollution control laws. Careful scrutiny of these laws is essential in assessing their utility in controlling nonpoint source pollution. For example, in about half the states, water pollution control provisions superficially resemble the federal Clean Water Act's prohibition of the discharge of a pollutant without a permit, 33 U.S.C. 1311(a), but unlike the federal act can be applied to nonpoint source pollution because they lack the limitation in 33 U.S.C. 1362(12) that defines "discharge of a pollutant" as "from any point source."

General discharge prohibition laws come in two major types. One type prohibits the discharge of any substance (or pollutant, or waste) without a permit. This is broad authority and

can serve either as the basis for adopting a permitting program by regulation or for enforcement against discharges in appropriate case-by-case settings. Some states with this type of authority have adopted explicit statutory or regulatory exemptions for agriculture or forestry activities. The definition of "waste" or "pollutant", if these terms are used rather than "any substance" in such provisions may present difficulties in controlling nonpoint discharges of sediments or properly applied agricultural chemicals in some states.

Even more states have provisions that simply prohibit the causing of "pollution," or causing or contributing to the exceedance of water quality standards. In these states, however, the difficulty of proving a direct link between a particular discharge and the condition of a waterbody can be substantial, or at least expensive absent ongoing and extensive monitoring. Nevertheless, these provisions allow states to impose sanctions and obtain compliance in relatively clear-cut cases. Provisions in state public health and penal codes and fish and game laws, typically enforced as petty criminal offenses, also may prohibit specific kinds of discharges that detrimentally affect public waters, cause nuisances, impair public health, or kill fish. Again, these require proof of a detrimental effect directly traceable to the operation in question before enforcement action may be taken.

The general discharge prohibitions primarily operate as back-up enforcement authorities, used when voluntary and incentive measures fail, or when no other authority exists in a given area. However, in some states they serve as the basis for the imposition of direct regulatory requirements upon nonpoint source dischargers. More states apply enforceable mechanisms to require operating standards and practices through targeted laws, such as erosion control laws, forest practices laws, and agricultural conservation laws.

Enforceable erosion and sediment control laws provide one significant area of control. Some of these programs are statewide in application, many are delegable to local governments or conservation districts. However, most of these programs exempt agriculture or at least normal agricultural activities; some exempt both agriculture and forestry. Thus, where these laws exist, and where they have coverage beyond simple NPDES stormwater permitting, they are usually directed at disturbance of earth for development or land conversion activities.

Forest practices laws play a role in establishing enforceable nonpoint source pollution controls in about a dozen states - primarily on the west coast and in New England - which have forestry laws with enforceable statewide standards. These states require the preparation and approval of harvest plans incorporating state standards or prescribed best management practices (BMPs). Other states regulate forest practices through erosion and sediment control laws. Even more common are forestry-related requirements establishing riparian buffer zones, limiting percentage of vegetation that may be removed near a waterway, special rules for timber operations in wetlands, and similar targeted requirements. While these approaches all rely on prescriptive enforceable requirements, another approach has been adopted by a handful of states. These do not require the enforceable implementation of particular standards statewide, but have instead adopted a "bad actor" authority that allows them to issue orders to halt particular logging operations that are actively discharging pollution.

Another approach with some relevance to forest sources of nonpoint source pollution is the increasing number of states that now require licensing of loggers and/or professional foresters. While licensing does not itself limit nonpoint source pollution, it can serve as a means to have timber operations designed and supervised properly, and assures familiarity of operators with BMPs.

Agriculture is the most problematic area for enforceable mechanisms. Many laws of general applicability, as noted above, have exceptions for agriculture. Where state laws exist, they often defer to incentives, cost-sharing, and voluntary programs. Nevertheless, about a fifth of the states have some statewide sediment requirements applicable to agriculture, often administered by local governments or soil and water conservation districts. Even more states (about a fourth) authorize individual soil and water conservation districts, as a matter of local option, to adopt enforceable "land use regulations" for the control of erosion and sedimentation. But most of these require approval by landowner referendum, with approval requiring a super-majority (ranging from 66 to 90 percent) in order for such regulations to become effective.

Enforceable regulation of agricultural nutrients presents a mixed picture. Enforceable authorities most commonly include concentrated animal feeding operation (CAFO) regulations similar to the federal requirements, but with variations on the number of animals, or with the addition of siting requirements. Some states have adopted "accepted agricultural practice" requirements, or nutrient regulations, that are enforceable. Most states have laws regulating fertilizers, but only to ensure content and efficacy; only a few have provisions that address misapplication of fertilizers or water pollution resulting from such application. Finally, a number of states have enforceable provisions allowing districts or agencies to order abatement of agricultural pollution. Several of these laws provide that abatement cannot be ordered unless state or federal cost-share money is provided to help pay for the required action.

In the context of both forestry and agriculture, states have in many different ways contrived mechanisms to make BMPs either enforceable or at least something more than voluntary by linking them to other enforcement mechanisms. There are at least five such approaches. Some laws, such as state comprehensive forest practices laws, make BMPs directly enforceable in connection with required plans and permits. Another approach makes BMPs enforceable, but only after the fact when a "bad actor" is causing pollution. A third approach makes BMPs the basis for an exemption from a regulatory program. For example, a law may provide that compliance with BMPs will allow a forestry operation not to need a permit under a critical areas program, or a farm not to comply with an erosion and sediment control law. Another approach makes compliance with BMPs a defense to a regulatory violation; such provisions include those that prohibit a state from taking action under a water pollution control statute against a farm that is implementing BMPs, whether or not the operation is causing pollution. Finally, a substantial number of states make compliance with agricultural BMPs a defense to nuisance actions.

Pesticide discharges are regulated indirectly by most states. Most states provide for state registration of pesticides, and for licensing of dealers and various classes of applicators (with typical exemptions for farmers applying pesticides to their own or neighbors' property). States typically have the ability to prohibit or restrict uses in areas where there is evidence of damage or harm. Some states have broad prohibitions of causing harm anywhere, but in most states these provisions do not cover "use" or application of pesticides, but only transport, storage, and disposal. Several states have prescribed responses if contamination is shown by state monitoring of waters or groundwaters.

Several other sources of nonpoint source pollution are subject to enforceable mechanisms. Onsite sewage disposal systems (septic tanks) are usually locally regulated by building codes and health officials. However, a significant number of states have adopted requirements at the state level and delegated administration to local governments. Only a small number of the state laws explicitly require the owner to maintain the proper functioning of the system. There are often special requirements in coastal areas for the construction and maintenance of such systems. Hydromodification, including drainage and stream alteration activities, is subject to a great deal of state regulation, some of which addresses nonpoint source impacts of the activity. Less explicit state law speaks to highways and certain other state agency activities, but some mechanisms exist there as well.

With respect to most of the issues described above, the most sophisticated state enforceable requirements appear to be arising on a targeted watershed basis. There are typically more explicit operating requirements and clearer enforcement authorities in the context of watershed protection areas, estuaries and coastal waters, wild and scenic rivers, and targeted impaired waters. This presents both a greater level of complexity for understanding state enforceable mechanisms and an opportunity for further work, research, and analysis. Federal decisionmakers can assist in the development of state enforceable authorities by undertaking studies of the effectiveness of these authorities in particular watersheds and with respect to particular impaired waters.

This report demonstrates the great diversity of state legislation imposing enforceable mechanisms. It identifies the kinds of responses that state and federal decisionmakers can draw upon in filling gaps and dealing with remaining water quality problems in the nonpoint source context.

Chapter One:



Introduction

After 25 years of federal and state efforts under the federal Clean Water Act, nonpoint source pollution remains a significant problem. The Act's enforceable provisions are directed at discharges from point sources - regulating the discharge of pollutants to surface waters from pipes, outlets, and other discrete conveyances. In contrast to this enforcement approach, nonpoint source water pollution - polluted runoff - is addressed primarily through non-regulatory means under the Act.

Yet water pollution from nonpoint sources remains a substantial contributor to the impairment of waters across the nation. Various approaches have been used to control such pollution, including assistance to states from federal planning and grant programs under the Clean Water Act (e.g., 33 U.S.C. §§ 1288, 1329). Common strategies at the state level include watershed and land use planning, development of voluntary best management practices (BMPs), technical assistance programs, cost-sharing for implementation of prevention and control measures, and - the focus of this study - some enforceable mechanisms, including regulation and liability provisions.

State adoption of enforceable mechanisms has occurred largely in the absence of any direct federal requirement or mandate. But the federal Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) provided impetus to most coastal states to identify enforceable mechanisms applicable to activities causing or contributing to nonpoint source pollution in the coastal zone. 16 U.S.C. §§ 1455(d)(16), 1455b. The implementation of urban and industrial stormwater permitting by the states under the 1987 Water Quality Act has also resulted in some states taking a more comprehensive approach to sedimentation and polluted runoff beyond simply meeting the federal requirements. Acting independently, some states have adopted innovative programs or employed older pollution control authorities to control nonpoint source pollution. There is much activity, ferment, and interest in this area.

The Environmental Law Institute has examined what enforceable mechanisms the states have available to them, the scope of the existing mechanisms used by the states, and the general limitations and impediments that accompany some of these mechanisms, in order to inform the nation's policy decisions on the remaining nonpoint problem. This report summarizes the Institute's findings.

STATE LAW: DIVERSE AND CHANGING

It is important to recognize at the outset that both the existence and scope of legally enforceable measures vary widely among the states. Absent explicit federal requirements in the area, such variation is not only to be expected, but somewhat desirable as it provides an opportunity to assess alternative approaches.

Some states have attempted to achieve broad coverage over polluting activities in their enforceable nonpoint source control mechanisms, while many others have taken aim at specific problems. Still other states have little in the way of an articulated enforceable scheme, although even these generally have some statutory enforcement authorities that could be used to address particularly damaging discharges from nonpoint sources. It is fair to say that no state is entirely without any enforceable authority relevant to nonpoint source discharges. While some states have few such authorities, others have adopted a bewildering array of enforceable tools applicable to specific watersheds, specific activities, and specific effects on the environment. These are frequently paired with equally bewildering arrays of exemptions and exclusions.

Understanding what enforceable mechanisms exist is important -- both in order to structure federal and state programs that can improve and maintain the nation's water quality, and to operate fairly in addressing the respective responsibilities of point and nonpoint source dischargers for water quality improvement.

The task of understanding state enforceable controls is quite difficult because no two states have adopted anything like the same set of laws. And even when the laws appear quite similar, they often have varying definitions, enforcement mechanisms, and procedures. In more than one instance, even laws that use identical words can have quite different scopes because of minor changes in the wording of the relevant definitions. These variations, along with the widely varying complements of laws enacted by each state, make state-to-state comparisons of particular laws difficult. One state may address nonpoint source silvicultural discharges through its broad sediment control statute, while another may reach the same conduct through a forest practices law, a combination of watershed-specific laws, or a water pollution control statute that covers some forms of nonpoint discharges as well as point source discharges.

This extreme variability also has another lesson for the policymaker: state programs can only be understood whole. The mere compilation of a list of authorities does not reveal their interconnection, whether and how they can be used in practice given institutional and procedural constraints, or how programs delegated to counties, localities, or watershed districts can be evaluated in relation to apparently similar state programs that are not so decentralized. As a result, even this study - looking at numerous authorities across all of the states - necessarily gives an incomplete picture of the individual capacity of any one state.

Any research effort examining the states is also faced with rapidly changing information. There is more than the typical amount of flux in the many state laws that affect nonpoint source

discharges. This is true for at least three reasons:

First, state legislatures typically respond to new and urgent problems. As new pollution problems are identified as important, or are elevated in importance as older problems are being solved, legislative responses become more likely. This is clearly the case with respect to such nonpoint source issues as animal waste (particularly with respect to siting issues), silvicultural practices affecting rivers and watersheds, biological effects such as *Pfiesteria piscicida*, impacts of suburban development, the cost of providing additional levels of treatment at publicly owned treatment works, and new interest in the recovery of river corridors. States are often the first line responders to the emergence of new problems or the ascendancy of older ones.

Second, state action is beginning to be affected by the CZARA-driven upgrades to nonpoint source programs in the coastal states. The "conditional approvals" given by the Environmental Protection Agency (EPA) and the National Oceanic and Atmospheric Administration (NOAA) to many of these programs will require states to seek new "enforceable mechanisms" or to demonstrate the utility of such existing mechanisms over the course of the next several years if their programs are to remain compliant and eligible for continued nonpoint source grant funding under the Clean Water Act and coastal zone funding under the Coastal Zone Management Act. A prior wave of modest enforceable nonpoint control mechanisms was launched by the stormwater permitting programs under the 1987 Water Quality Act. While many states simply implemented the requirements of the program, others took the initiative to add additional land use and sediment controls in implementing legislation.

Third, state action is beginning to be affected by the impact of judicial and EPA requirements for states to establish and implement Total Maximum Daily Loads (TMDLs) for their impaired waters. This task will require both better understanding of pollution sources in affected waterbodies, and development of effective state responses in requiring pollution prevention and controls. 33 U.S.C. § 1313(d).

Indeed, greater investment in the assessment of impaired waters in state biennial reports under 33 U.S.C. 1315(b) is also playing a role in the evolution of state nonpoint source authorities. These state assessments and improved technical tools and capacity, including the use of biological indices, are beginning to reveal the locations and scale of pollution problems only guessed at in prior decades. The identification of particular impaired waters can lead to political pressures at the state level to adopt control and abatement measures.

In sum, this area is one in which state laws are changing. At the same time, however, many of the laws that create enforceable duties for nonpoint source dischargers are quite old. As described below, some are the legislative codifications of centuries-old common law nuisance principles. Others are broad provisions in state clean water laws enacted in the 1960s and 70s that apply to nonpoint sources, but that may not have been implemented to their fullest extent by regulations or enforcement programs. Still others are state laws, such as planning and zoning laws, that have relevance to pollution-causing activities, but that were not originally drafted with

pollution prevention effects in mind. This mixture of new laws and new implementation opportunities for older laws constitutes the complement of enforceable mechanisms available in most states.

This study is a snapshot of state laws at one time, taken with the knowledge and expectation that changes are continuing. The picture that emerges is intended to inform the broader discussion and to help lead to the development of effective approaches as states continue to make laws in this area.

RESEARCH APPROACH

Scope

This study examined the laws of the fifty states, Puerto Rico, and the District of Columbia. It did not examine tribal laws, nor the laws of individual cities or municipalities. However, to the extent to which duties and enforceable mechanisms were created by state law and delegated to political subdivisions, these state laws were examined.

It is necessary to define the scope of the study with respect to "nonpoint" source pollution because of the increasing overlap of this category with sources regulated under the point source (NPDES) provisions of the Clean Water Act. These areas of overlap have arisen, in part, as a result of decisions by Congress to expand the regulatory reach of the Clean Water Act incrementally -- primarily by bringing more categories into the point source permitting program.

The municipal and industrial stormwater program is the most significant of these potential overlaps. Section 402(p) of the Clean Water Act, 33 U.S.C. 1342(p), enacted in 1987, established a two-phase program. Under the first phase, NPDES permits (individual, general, or multi-sector or "group" permits) are required for stormwater discharges from municipal separate storm sewers serving populations greater than 100,000, and stormwater discharges from certain industrial activities including, initially, construction sites of five acres or larger. Permits may also be required case-by-case if a stormwater discharge is determined to violate a water quality standard or is a significant contributor of pollutants to the waters of the United States. The second phase will cover stormwater discharges from smaller metropolitan areas, smaller construction sites, light industry, and other activities. Obviously, not all earth-disturbing activities resulting in runoff are captured by the stormwater permitting program, and many such activities are regulated, if at all, by the states under other authorities. Because state authorities often cover both activities subject to stormwater permitting and other activities, this study attempted to include the general state authorities that appeared to cover these other activities, even if many also clearly fall within the § 402(p) universe.

A similar problem was presented by enforceable mechanisms dealing with agricultural

sources of animal wastes. Large concentrated animal feeding operations (CAFOs) are regulated as point sources under the Clean Water Act, 33 U.S.C. 1362(14). Many states, accordingly, regulate these operations through amendments to their water pollution control regulations corresponding to 40 CFR 122.23 and 40 CFR Part 122, App. B. Such point source regulation is not within the scope of this study. This study focuses on state nonpoint source authorities affecting animal wastes that appear to have a different reach from the federal CAFO regulations.

Finally, section 401 of the Clean Water Act, 33 U.S.C. 1241, presents a related issue. That section requires states to certify whether an activity to be authorized under a federal license or permit will comply with adopted state water quality standards. If the state denies such certification, the federal license or permit may not be issued. Because all states are required to apply this authority, a state-by-state analysis was not undertaken. However, it should be noted that this authority is used by some states to address some forms of nonpoint source pollution, although the provision's applicability to nonpoint source discharges remains in some dispute, *see Oregon Natural Desert Association v. Thomas*, 940 F. Supp. 1534 (D. Ore. 1996) *appeal pending* (401 applies to nonpoint discharges).

In summary, this study examines state laws that cut across areas that are also subject to federal regulations or requirements, but focuses on state laws that do more than simply implement the federal requirements in order to highlight state actions that differ from mere conformance to federal requirements.

Enforceable Mechanism

"Enforceable mechanism" is defined narrowly for purposes of this study. The definition is designed to identify only those authorities that can impose an obligation upon an uncooperative discharger as completely as upon one that is cooperative. In consequence, the term is not identical to the term "enforceable policies and mechanisms" as defined in CZARA and interpreted in the guidance documents issued by EPA and NOAA for that program. In particular, the loss or recoupment of incentives for nonpoint source dischargers participating in voluntary programs is not deemed an "enforceable mechanism" for purposes of this study.

For purposes of this study an enforceable mechanism consists of a *standard* applicable to an identified entity or entities; a *sanction* such as a civil, criminal, or administrative penalty, loss of a license, and performance of required remedial action (but not mere loss of an incentive); and a *process*, either explicit or implied, for applying the standard and imposing the sanction. For example, the standard may be a provision that "no person" shall "discharge a pollutant so as to cause or contribute to a violation of water quality standards," while the sanction and process may include administrative or civil actions leading to penalties, cessation of the discharge, abatement, cost recovery, criminal fines and jail terms, or other remedies.

An enforceable mechanism is not limited to "regulatory" or permit-based regimes similar to the NPDES program. Indeed, mere liability for a clearly defined action is sufficient. Thus, the availability of injunctive relief and damages, or provisions for summary abatement and cost recovery, or the power to issue binding cease-and-desist orders qualify as enforceable mechanisms.

Study Methodology

The researchers developed a template identifying categories of state laws that affect activities that generate nonpoint source pollution. This template was developed to guide research that necessarily ranged across numerous titles of any state's legislation - from the criminal code to the public health code, from the environmental code to the agricultural code. The template's categories were based on prior state studies conducted by the Environmental Law Institute, on a review of the required CZARA management measures and a preliminary sampling of program submissions by coastal states under that law, and on the researchers' professional judgment.

The template was then used to guide a broad review of the state legislative codes for all fifty states, Puerto Rico and the District of Columbia. State laws were reviewed in their published and codified form, supplemented by some computer-assisted research. CZARA program submissions were also reviewed for those states participating in the CZARA process as a cross-check on the primary research.

In order to identify the principal state authorities, and to keep the study within manageable scope, the research was conducted upon state statutes. State regulations were consulted only where needed to clarify the jurisdiction conferred by state laws. Thus, for example, where a forest practices statute clearly created enforceable obligations, state regulations under that statute were not reviewed. Conversely, where a state statute was ambiguous on the enforceability of a program, the regulations were consulted, but only to the extent needed to understand the reach of the statute. Once a statute was identified as enforceable or potentially enforceable, no attempt was made to list all of its substantive requirements. Thus, for example, the study indicates the existence in various states of enforceable land use standards for erosion and sediment control, but it does not identify the specific buffer zone requirements, erosion rates, or control structures required by such programs.

For similar reasons, and because this was a study of *state* enforceable mechanisms, the study does not identify and discuss *local* ordinances and rules. Instead, the study identifies those state laws that create the enforceable authority in local governments, or that authorize delegation of the relevant enforceable statewide control programs to local governments.

Finally, because this study is intended to identify relevant legal authorities, it looks at the maximum possible uses of existing law for nonpoint source pollution control, rather than at state implementation practices. The study is aimed at answering the question: What kinds of existing tools do the states have available to them in the event that they need to control nonpoint source water pollution by enforceable means? Thus if a state has an applicable law that has remained unenforced - for policy reasons, lack of staff, absence of controlling judicial construction, failure to adopt regulations, or other reasons - the law is nevertheless included in this study.

GOALS OF THIS REPORT

This report provides an overview of the current legal landscape. It identifies the kinds of state laws that exist, the opportunities they present, and their limitations. The report is primarily intended to provide objective baseline information for policy makers and others wrestling with the need to control nonpoint sources of water pollution that have not, thus far, been amenable to other forms of control.

The report serves three major functions. First, it is intended to help guide *federal* legislation, regulation, and policymaking that may hereafter affect nonpoint source discharges. Such federal decisions may come in the context of Clean Water Act reauthorization, federal budgeting priorities, and components of other federal legislation including transportation, flood control, water projects, and agriculture. Administrative decisions informed by this report may include those regarding stormwater, state water quality standards, TMDL development, and other implementation issues. The report is intended to enable federal policymakers to draw upon state trends and experiments in selecting federal approaches, to identify general weaknesses or gaps in existing state approaches, and to identify useful state laws and programs that should

not be inadvertently undermined by federal decisions to adopt new federal policies, requirements, and guidelines.

Second, the report is intended to identify potentially useful state approaches that can be *borrowed by other states* and used in drafting legislation. This function is intended to make the most of the states' functions as "laboratories" for innovation and experiment, enabling states to borrow from similar states with less risk and greater likelihood of legislative acceptance. Thus, the report is intended to assist states in improving their programs. At the same time, by establishing a baseline or "snapshot" of current state practice, the report can serve as the basis for future work analyzing trends and assessing effectiveness of various approaches. With baseline information, state mechanisms can be tracked for effectiveness in the future by others, and compared, leading to a better understanding of what works and why.

Third, the report identifies - indeed, in some cases, exhumes - state laws on the books that could be *used creatively* by individual state agencies and law enforcers (such as public health officers, district or states' attorneys, agency staff, and state attorneys general) to deal with specific nonpoint source problems. Some of the older fish and game authorities, public health and nuisance provisions, and other laws may provide ways to address - albeit imperfectly - some nonpoint problems without requiring agencies to go back to the legislature for new authority. While these laws cannot substitute for integrated nonpoint programs including enforceable mechanisms where necessary, they can be components of such programs and can bridge gaps in existing authorities.

The report finds that there are numerous legal authorities on the books that can be used to establish and enforce nonpoint source control requirements. It also finds that these authorities appear in different kinds of state laws, with many exemptions and limitations, and that - as a consequence - the availability of an enforceable authority to address any particular nonpoint source discharge may depend upon complex issues of interpretation, evidence, and process.

Chapter Two:



Discharge Prohibitions

Virtually all of the states have some enforceable statutory authority to deal generally with the subject of water pollution and activities on the land that may lead to such pollution. These authorities come in several forms. Many are parts of states' broad water pollution control laws. Provisions in public health and penal codes, typically enforced as petty criminal offenses, may prohibit specific kinds of discharges and substances that detrimentally affect public waters. Statutory nuisance and public health laws provide additional authorities where certain adverse effects can be proven. So does the common law of nuisance. And state fish and game protection laws frequently contain general provisions prohibiting pollution harmful to fish; or imposing liability for fish kills due to pollution events, not limited to point source pollution.

Although these were collected separately by source of law, these broad authorities discussed together below. The key issues in each statute are determining exactly what needs to be proven to demonstrate a "violation" of the law resulting in imposition of a sanction. Careful scrutiny of these laws is essential in assessing their utility in controlling nonpoint source pollution. For example, while various state water pollution control act provisions superficially resemble the federal Clean Water Act's prohibition of the discharge of a pollutant without a permit, 33 U.S.C. 1311(a), unlike the federal act many of these can be applied to nonpoint source pollution because they lack the limitation in 33 U.S.C. 1362(12) which defines "discharge of a pollutant" as "from any point source."

ELEMENTS OF THE GENERAL DISCHARGE PROHIBITION

Materials Discharged

The first issue in assessing the potential applicability of any discharge prohibition to any nonpoint discharge is to determine what materials are included in the prohibition. A law which prohibits the discharge of "wastes" without a permit may, for example, have some utility in regulating discharges of manure from stock raising operations or motor oil from suburban driveways, but be useless in addressing sediment discharges and be uncertain in addressing farm runoff containing pesticides. On the other hand, a similar state law prohibiting unpermitted discharges of "pollutants" may be limited by the need to show that the substance discharged either is on a list of pollutants or actually results in pollution of the receiving waters.

Complicating these definitional inquiries is the fact that states frequently do not define the same words in the same ways. For example, Fla. Stat. 403.031(12) defines "wastes" as "sewage, industrial wastes, and all other liquid, gaseous, solid, radioactive, or other *substances which may pollute* or tend to pollute any waters of the state." This definition, which is similar to definitions of "wastes" in a number of other states, clearly avoids the problem of a waste definition that excludes sediment and other non-discarded substances. But at the same time it raises problems of proof similar to those in state statutes prohibiting discharges of "pollutants" -- that an impact on the receiving waters may need to be shown in order for enforcement to occur. The broadest provisions found among the states prohibit the unpermitted discharges of "any substance" or any "organic or inorganic matter." (e.g., S.C. Code 48-1-90)

Another kind of common state statute, frequently found in public health laws, criminal laws, fish and game laws, or state environmental laws, actually lists materials that cannot be lawfully discharged - either at all, or without a permit - into the waters of the state or onto land adjacent to such waters. These lists typically include such specifics as offal, ashes, rubbish, paper, wood, sawdust, sludge, and other specific materials, only some of which are typical of nonpoint source pollution. Obviously, these provisions have only limited utility in the nonpoint source enforcement context. However, some state laws end these lists with a catch-all provision -- such as "anything else of an unsightly or unsanitary nature" (Ohio Rev. Stat. 1531.29) or "or substance in any form resulting from domestic, industrial, commercial, mining, agricultural, or governmental operations" (Fla. Stat. 403.413), or "any other article which might pollute the water" (Vern. Tex. Code Ann. Water 11.090).

Although such provisions may expand the reach of some narrow "list"-type statutes, the expansion may be limited by two common legal doctrines of statutory construction. The first is *noscitur a sociis*, which simply means that a word is interpreted in accordance with the words around it. Thus, for example, if the list contains only materials associated with industrial processes, but no agricultural materials, the catch-all provision will be interpreted to reach only industrial-type materials. Similarly, if all the listed materials are wastes or products of human action, the doctrine may constrain the use of the law in reaching sediment discharges. The second doctrine, which is similar but not identical, is *ejusdem generis*, which indicates that the last word or phrase in a series should be read as a subset or subcategory of the preceding terms rather than as a term with greater breadth. Of course, the doctrine of plain meaning can be invoked in opposition to these others. The upshot is that reliance on a broad catch-all phrase at the end of a list has some risks in an enforcement context depending on the substance at issue.

Prohibited Conduct

The second major issue in interpreting the general discharge prohibitions is to determine what conduct is covered by the law. Such provisions usually come in two forms: (1) prohibition of mere discharge (or discharge without permit) without requiring the state to demonstrate any effect on the receiving waters, and (2) prohibitions of discharges that have, or can be projected to have, adverse effects on receiving waters.

Connecticut law illustrates both types. For example, Conn. Gen. Stat. 22a-430(a), 22a-423, prohibits any person from discharging or maintaining any discharge of "any water, substance or material into the waters of the state without a permit for such discharge...whether or not such substance causes pollution." At the same time, Conn. Gen. Stat. 22a-427 prohibits any person from causing "pollution" of any of the waters of the state.

The typical type (1) prohibition states that the discharge of a material, substance, or waste into the waters of the state or onto the land where it may enter the waters of the state without a permit is unlawful. These provisions are typically the cornerstone of state NPDES programs for point source discharges, but they may also have some application to nonpoint discharges where state definitional limitations do not constrain such use. Approximately half the states have such provisions in their water pollution control laws without statutory provisions limiting them only to point source discharges.

The difficulties in applying type (1) prohibitions to nonpoint sources largely arise in two ways. First, a significant number of the states with such provisions have explicit statutory or regulatory exceptions for agriculture and/or forestry (e.g. Fla. Stat. 403.927, 314 Code Mass. R. 3.05; Alabama Admin. Code 335-6-6-.03). While these exceptions remove significant nonpoint sources from the scope of these provisions, the exceptions themselves demonstrate the reach of the provisions over nonpoint source activities that are not specifically excepted. The second difficulty is more complex. Where there is a prohibition on discharge without a permit, but no permit scheme has ever been established, is the prohibition enforceable? A number of states have resolved this issue - either by establishing explicit permit authorities, or alternative authorities, or by case law - but others have not. In general, use of type (1) prohibitions where no permit program exists for nonpoint source discharges is possible, and many states assert the right to use such prohibitions in after-the-fact enforcement actions against polluters. But after-the-fact enforcement in a limited number of cases may not provide the same kinds of environmental benefits as a clear regulatory program that operates in advance of pollution events.

The vast majority of states have a type (2) prohibition that is potentially applicable to nonpoint source pollution. The typical type (2) prohibition does not address the issuance of a permit or the lack thereof. It simply prohibits discharges causing an identifiable harmful effect on the receiving waters. Such provisions typically make it "unlawful for any person to cause pollution of any of the waters of the state" (e.g. Okla. Stat. tit. 27A 2-6-105; Neb. Rev. Stat. 81-1506). Some of these provisions may spell out what is meant by "pollution," or may require that the state prove that the discharge caused a violation of a water quality standard in order to enforce the provision (e.g., Miss. Code 49-27-29(2)(a)(ii)). Some state laws explicitly prohibit not only discharges that "cause" water quality standards to be violated, but also discharges that "contribute" to such conditions (e.g., N.Y. Env. Cons. L. 17-0501; Indiana Code 13-18-4-5).

Type (1) and (2) prohibitions found in state water pollution control laws are usually enforceable by the entire panoply of regulatory tools, including administrative orders, injunctions, civil penalties, criminal fines and sentences, and, in some cases, summary abatement and cost recovery.

In addition to these two types of general prohibitions found in water pollution control laws, there are other common prohibitions. Typically found in other parts of the state codes, these are usually directed at specific environmental harms beyond the mere exceedance of water quality standards or causing pollution. These include provisions limited to conduct that causes or threatens to cause pollution of a drinking water supply, that endangers public health, that causes a nuisance, or that results in the death of fish or other aquatic life. Using these provisions for enforcement requires proof of a particular kind of adverse effect. These provisions are typically enforceable as misdemeanor offenses with modest fines, some provision for jail time or imprisonment, and are often subject to abatement by injunction. To the extent to which these are petty criminal offenses, proof of wrongful intent (or at least reckless disregard) may be required.

Location of the Discharge

The last issue that arises with general prohibition statutes is whether the material actually must enter the water in order for a violation to exist. While type (1) provisions often have such a requirement, a significant number of states, although not a majority, contain provisions that prohibit the placement of materials where they are "likely to cause pollution" (e.g., Ark. Code Ann. 8-4-217(a)(1); N.D. Cent. Code 61-28-06) or "likely to enter the waters" (e.g., R.I. Gen. Laws 46-12-5(a)). Some states approach this problem a different way. For example, Connecticut authorizes issuance of an order where any

person has created or is maintaining a condition "which reasonably can be expected to create a source of pollution to the waters of the state." Conn. Gen. Stat. 22a-432.

REVIEW OF STATE GENERAL DISCHARGE PROHIBITIONS IN WATER POLLUTION LAWS

This section summarizes the general prohibition authorities in the respective states and notes explicit limitations. It does not include state authorities that are explicitly limited to point sources - e.g. prohibitions of "discharge" where the state definition is limited to point sources. This summary is intended to illustrate the potential scope of these provisions. Obviously, issues of statutory construction, regulatory interpretations, typical practice, and state institutions will influence the actual application of the provisions. In effect, this section identifies the outer bounds of such authorities as they appear on the books.

It is important to recognize in this brief summary that states have other authorities available to them -- many discussed later in this report. Indeed, where states are employing explicit strategies under other authorities aimed directly at nonpoint sources, they may make little or no use of the authorities summarized in this section. The following summary is organized by EPA region.

As noted above, Connecticut prohibits both the discharge of any substance without a permit, and causing water pollution. Both provisions are potentially applicable to nonpoint sources. Conn. Gen. Stat. 22a-427, -430. Maine prohibits the discharge of any pollutant without a permit, but explicitly provides that this provision is not violated by any discharge that is in compliance with an approved agricultural erosion and sediment control plan, 38 Maine Rev. Stat. 413; Maine also prohibits any violations of water quality notwithstanding any permits or exemptions, but requires establishment of a mixing zone before enforcement of this provision against any source may occur. 38 Maine Rev. Stat. 451. Massachusetts prohibits discharge of a pollutant without a permit, 21 Mass. Gen. L. 42, but agricultural and silvicultural nonpoint source discharges are exempted by regulation. 314 Code Mass. R. 3.05. New Hampshire prohibits discharge of a waste without a permit, but also has a provision making it unlawful for any person to dispose of wastes in such manner that water quality standards will be violated. N.H. Rev. Stat. Ann. 485-A:12. Rhode Island prohibits the placement of any pollutant in a location where it is likely to enter the waters, and the placement of any solid waste or debris in the waters; but it only prohibits the "discharge [of] any pollutant" from a "point source" R.I. Gen. Laws 46-12-5. Vermont prohibits discharge of any substance without a permit, but expressly exempts the "proper application of fertilizer to fields and crops." 10 Vt. Stat. Ann. 1259.

New Jersey law prohibits discharge of pollutants without a permit or as otherwise authorized, N.J. Stat. Ann. 58:10-6; and also prohibits the placement of "deleterious" substances into the waters or where they can find their way into such waters, but exempts from the latter provision chemicals used in agriculture, forestry, horticulture, and livestock if done in an approved manner. N.J. Stat. Ann. 23:5-28. New York prohibits the direct or indirect discharge of any substance that "shall cause or contribute to" a condition in violation of water quality standards. N.Y. Env. Cons. L. 17-0501. Puerto Rico authorizes its state agency to forbid any discharges that do not have the appropriate permit. 12 P.R. Laws Ann. 1131(13)(A)(a), and also expressly prohibits direct or indirect discharge of any substance capable of polluting or leading to pollution in violation of water quality standards. 24 P.R. Laws Ann. 595.

Delaware requires a permit for any activity "which may cause or contribute to a discharge of a pollutant into any surface or ground water" 7 Del. Code 6003. The adopted implementing regulations appear limited to point source discharges to water and land, but the statute is not so limited and Delaware maintains that this authority also applies to nonpoint sources; indeed, Delaware's nonpoint programs rely in part upon this authority. District of Columbia law expressly authorizes the mayor to regulate and require permits for nonpoint source pollution. D.C. Code 6-926. Maryland law prohibits the discharge of a pollutant without a permit or other authorization and allows the imposition of permit requirements for activities that could cause or increase the discharge of pollutants. Md. Code Ann., Envir. 9-322, 9-323(b). Pennsylvania prohibits the discharge of any substance resulting in pollution, 3 Purdon's Stat. 691.401; Pennsylvania also has a provision prohibiting discharge without a permit, which it has used for nonpoint sources, but the provision applies only to industrial wastes, 3 Purdon's Stat. 691.301. Virginia law prohibits the discharge of wastes or any "noxious or deleterious substances" or the pollution of waters without a permit, Va. Code 62.1-44.5, as well as the placement of any substance which may contaminate or impair the lawful use or enjoyment of waters of the state except as permitted by law. Va. Code 62.1-194.1. West Virginia's general water pollution control law appears not to provide for the regulation or prohibition of nonpoint source discharges. W. Va. Code 22-11-8.

Alabama requires a permit for discharges of "pollution", Ala. Code 22-22-9(I)(3), but although the requirement is not limited to point sources, the regulations provide that a permit is not required for discharges "from non-point source agricultural and silvicultural activities." Ala. Admin. Code 335-6-6-.03(a). Florida law provides that causing pollution except as provided by law is prohibited, Fla. Stat. 403.161, and requires permits for discharges of waste that contribute to violation of water quality standards, Fla. Stat. 403.088, but further provides that agricultural activities (including all "normal and customary" farming and forestry operations), and agricultural water management systems, are authorized and do not require permits. Fla. Stat. 403.927. Georgia expressly requires anyone seeking to "erect or modify facilities or commence or alter an operation of any type which will result in the discharge of *pollutants from a nonpoint source* into the water of the state, which will render or is likely to render such waters harmful to the public health, safety, or welfare, or harmful or substantially less useful for domestic, municipal, industrial, agricultural, recreational or other lawful uses, or for animals, birds or aquatic life" to

obtain a permit. Georgia Rev. Stat. 12-5-30(b). Kentucky prohibits the discharge of any pollutant or substance that shall cause or contribute to water pollution "in contravention of any rule, regulation, permit, or order or...the statute" Ky. Rev. Stat. 224.70-110; the law further provides that if a violation is traceable to an agricultural operation, it shall be handled under the state's enforceable agricultural water quality act rather than under the stricter water pollution control act. Ky. Rev. Stat. 224.120(10).

Mississippi prohibits pollution of the waters of the state or placement of wastes where they are likely to cause pollution, defining "pollution" as contamination not "in compliance with a valid permit," Miss. Code Ann. 49-27-29(2)(a)(I), 49-17-5(1), but the regulations provide that no permit shall be required for agriculture and silviculture nonpoint source pollution. Miss. Wastewater Reg. - Gen. Req. B.5. Mississippi has another provision, not linked to permitting definitions, prohibiting the discharge of any "wastes" which reduce water quality below adopted water quality standards. Miss. Code Ann. 49-27-29(2)(a)(ii). North Carolina prohibits the discharge of wastes and certain other discharges without a permit, N.C. Gen. Stat. 143-215.1(a); of perhaps greater immediate utility in the nonpoint context is its authority to issue "special orders" to "any person...responsible for causing or contributing to any pollution of the waters of the state within the area for which standards have been established." N.C. Gen. Stat. 143-215.2. South Carolina prohibits the direct or indirect discharge, seepage, or drainage of any substance into the waters of the state except in compliance with a permit. S.C. Code 48-1-90. Tennessee has a general prohibition against any discharge causing "pollution" except as properly authorized, Tenn. Code Ann. 69-3-114, but the law does not apply to any nonpoint source discharges from "any agricultural or forestry activity." Tenn. Code 69-3-120(g).

Illinois prohibits any person from causing, threatening, or allowing the discharge of any "contaminants" that would cause or tend to cause water pollution, or that would violate regulations or standards adopted by the Pollution Control Board. 415 Ill. Cons. Stat. 5/12(a). While this provision is not expressly limited to point sources, a second provision, 415 Ill. Cons. Stat. 5/12(f), which prohibits the unpermitted discharge of contaminants (without requiring evidence of water pollution) is expressly limited to point source discharges. Indiana law provides that a person may not "cause, permit or suffer to be...drained, allowed to seep, or otherwise disposed into any waters...any organic or inorganic matter that causes or contributes to a polluted condition of any waters" in violation of adopted water quality standards. Indiana Code 13-18-4-5. Michigan prohibits the direct or indirect discharge of any substance that may be injurious to health, safety or welfare, uses of waters, riparian lands, and fish and wildlife. Mich. Cons. L. 324.3109(1). Although this section is codified in a chapter of the code entitled "point source pollution control", Michigan law provides that chapter headings are not part of the act and are not to be used to construe the scope of the act. Mich. Cons. L. 324.103.

Minnesota has a general requirement of notice to the state of water pollution events and requires reasonable attempts by the discharger to minimize or abate pollution caused thereby. Minn. Stat. 115.061. Furthermore, by regulation, Minnesota has provided that "no sewage, industrial waste or other wastes shall be discharged from either a point or nonpoint source into

the waters of the state in such quantity or in such a manner alone or in combination with other substances as to cause pollution." Minn. Rules 7050.0210(13). Ohio's water pollution law prohibits causing pollution or placing any wastes where they cause pollution except in accordance with a permit, but exempts agricultural and silvicultural runoff and earthmoving activities subject to regulation under Ohio's nonpoint source control programs administered by soil and water conservation districts and local governments. Ohio Rev. Stat. 6111.04. These programs are discussed later in this report. The Ohio law also exempts runoff of excrement from domestic and farm animals, only some of which is subject to regulation under the referenced programs. Wisconsin law authorizes the state agency to issue orders for the abatement of nonpoint source pollution if the source is "significant" and impairs water quality. Wis. Stat. 281.20. The provision has limitations on its use to control pollution caused by animal waste and pollution from an agricultural source in a priority watershed, where other planning and implementation tools are to be used first.

Arkansas makes it unlawful for any person to cause pollution or place waste in a location where it is likely to cause pollution. Ark. Code Ann. 8-4-217(a). Louisiana prohibits any "activity" which results in the discharge of any substance to the waters of the state without the "appropriate permit, variance, or license." 30 La. Rev. Stat. 2075. It also prohibits the discharge of any substance that will tend to cause water pollution in violation of any provision. 30 La. Rev. Stat. 2076(A)(1). However, the law also provides that these and other provisions of the water pollution control law "shall not apply to any unintentional nonpoint-source discharge resulting from or in connection with the

production of raw agricultural, horticultural, or aquacultural products." 30 La. Rev. Stat. 2076(A)(2).

New Mexico's water pollution law does not itself contain a prohibition applicable to nonpoint source water pollution, but rather authorizes the water quality control commission to adopt regulations "to prevent or abate water pollution in the state" and to require permits. N.M. Stat. Ann. 74-6-4. Thus, the availability of any enforceable authority depends entirely on the promulgation of specific regulatory requirements. Oklahoma law makes it unlawful for any person to cause water pollution or to place wastes in any location where they are likely to cause pollution. Ok. Stat. Ann. tit. 27A, 2-6-105. This provision is expressly interpreted to apply to nonpoint sources. Ok. Regs. 252:610-7-1. Texas prohibits the discharge of waste, including agricultural waste, into or adjacent to any waters, and prohibits any other act which causes pollution of any waters, except as authorized. Vern. Tex. Code Ann., Water Code 26.121(a). The law exempts agricultural and silvicultural discharges in compliance with a certified water quality management plan under Ag. Code 201.026.

Iowa prohibits "disposal" of a pollutant (defined as "waste") by discharge into the waters of the state except pursuant to a permit. Iowa Code Ann. 455B.186. Kansas prohibits the discharge or placement or flowage of "sewage" (defined as any substance that contains human or animal waste products or excrement or any wastes from domestic, manufacturing, or other forms of industry) into the waters of the state except pursuant to a permit. Kan. Stat. Ann. 65-164. The law also allows the attorney general to take action to secure abatement of "abatable pollution of the surface waters detrimental to the animal or aquatic life in the state." Kan. Stat. Ann. 65-171b. Missouri law prohibits causing pollution or placing any water contaminant where it is reasonably certain to cause pollution; it also prohibits the discharge of water contaminants which reduce the water quality below adopted water quality standards if not otherwise subject to effluent regulations. Mo. Rev. Stat. 644.051. Nebraska law makes it unlawful to cause water pollution or to place any wastes in a location where they are likely to cause water pollution, or to discharge wastes that reduce the water quality in the receiving waters below adopted water quality standards. Neb. Rev. Stat. 81-1506.

Colorado's water pollution control law authorizes the water quality control commission to adopt regulations relating to any "activity" that "does or could reasonably be expected to cause pollution of any state waters in violation of control regulations or...any applicable water quality standard." Colo. Rev. Stat. 25-8-205. With this authority, the state clearly may choose to regulate nonpoint sources of pollution; however, "control regulations related to agricultural practices shall be promulgated only if incentive, grant, and cooperative programs are determined by the commission to be inadequate and such regulations are necessary to meet state law or the federal act." Colo. Rev. Stat. 25-8-205(5). Montana law makes it unlawful to cause water pollution or place any wastes "where they will cause pollution of any state waters." Mont. Code Ann. 75-5-605(a). However, the law exempts materials placed in connection with activities permitted by any other state or federal agency, 75-5-605(a), and expressly exempts from state nondegradation requirements those nonpoint sources existing on April 29, 1993, all new

nonpoint sources that follow "reasonable land, soil, and water conservation practices," land application of manure, and use of agricultural chemicals if done in accordance with an agricultural ground water management plan. Mont. Code. Ann. 75-5-317(2).

North Dakota law makes it unlawful to cause water pollution or place any wastes where they are likely to cause water pollution. N.D. Cent. Code 61-28-06(1)(a). South Dakota has a similar provision. S.Dak. Codified L. Ann. 34A-2-21. In addition, any discharge of wastes (defined as any polluting "substances") that results in degradation of water quality is also prohibited. S.Dak. Codified L. Ann. 34A-2-22. Utah prohibits causing pollution that constitutes a menace to public health and welfare, is harmful to fish or wildlife, or impairs beneficial uses of water, and prohibits placement of waste where there is "probable cause" to believe it will cause pollution. Utah Code Ann. 19-5-107. Wyoming makes it unlawful to "cause, threaten or allow the discharge of any pollution or waste into the waters of the state" except as authorized by permit. Wyo. Stat. Ann. 35-11-301. The prohibition has been held to apply to polluting activities for which no permit was available.

Arizona law requires the Department of Environmental Quality to adopt a permit requirement for point sources, and for certain facilities likely to pollute aquifers, and a "program to control nonpoint source discharges of any pollutant or combination of pollutants into navigable waters." Ariz. Stat. 49-203.A. Its general prohibition law makes it a criminal offense to (with criminal intent) discharge substances to waters without a required permit or other "appropriate authority," or to violate a water quality standard. Ariz. Rev. Stat. 49-263.A. California law requires a "report of waste discharge" from any person proposing to discharge "waste." The regional water quality control board must then issue waste discharge requirements (WDRs) - essentially a permit. Cal. Water Code 13260. However, these requirements may be conditionally waived by the regional board. Cal. Water Code 13269. California uses these requirement by first seeking to abate nonpoint source pollution through nonregulatory means, but reserves the power to either grant a conditional waiver (to secure operational changes in a discharger) or to require the report of waste discharge and issue a WDR.

Hawaii prohibits the discharge of any pollutant to waters of the state except as authorized by law or permit. Hawaii Rev. Stat. 342D-50. Hawaii, moreover, has explicit authority to regulate nonpoint source pollution under a provision that allows the issuance of enforceable nonpoint source rules which may include "water quality standards for specific areas, types of nonpoint source discharge, or management measures." Hawaii Rev. Stat. 342E-3(a). Nevada's general pollution prohibition authority is expressly limited to point sources. Nev. Rev. Stat. 445A.465. However Nev. Rev. Stat. 455A.565 also allows the state to prescribe controls for nonpoint sources ("diffuse sources") to prevent degradation of high quality waters, but not for "normal...farming practices". And 455.570 allows regulation of nonpoint sources existing on Jan 1, 1979 that are "significantly causing or adding to water pollution in violation of a water quality standard" and for new nonpoint sources where they impair high quality waters.

Alaska law provides that "a person may not pollute or add to the pollution of the...water

of the state." Alaska Stat. 46.03.710. Idaho has very limited jurisdiction over nonpoint sources. It defines "discharge" in its water pollution control act as not including "surface water runoff from nonpoint sources." Idaho Code 39-3602. Another provision states that nonpoint sources are not required to meet water quality standards other than those necessary to support designated uses, unless a TMDL is required to be developed. Idaho Code 39-3604. In the context of TMDLs for high-priority impaired waters, the law provides that "nothing in this section shall be interpreted as requiring best management practices for agricultural operations which are not adopted on a voluntary basis." Idaho Code 39-3610. Indeed, the only direct authority is a prohibition on new or expanded nonpoint activities which "can reasonably be expected to lower the water quality of an outstanding resource water," Idaho Code 39-3618, and these sources are entirely exempt from permitting or other regulation if they implement BMPs. Idaho Code 39-3620(6).

Oregon law prohibits any person from polluting waters of the state or placing any waste where it is "likely to escape or be carried into the waters of the state, and from discharging wastes into water if such discharge reduces water quality below the adopted standards. Ore. Rev. Stat. 468B.025(1). Washington prohibits the discharge of "any organic or inorganic matter that shall cause or tend to cause" water pollution, Wash. Rev. Code 90.48.080, and permits are required for disposal of material into the waters of the state. Wash. Rev. Code 90.48.160. However, the law does not authorize the adoption of a permit system for nonpoint sources or imposition of penalties for pollution arising from forest practices conducted in compliance with the state's forest practices law. Wash. Rev. Code 90.48.420.

The general prohibition authorities summarized above are typically used by states not to carry out a detailed regulatory approach to nonpoint source water pollution, but rather as "back-up" authority to other programs intended to control such pollution, or to deal with egregious cases in the absence of other programs. In many states, because of the absence of an implementation program, they may represent an unused tool in the toolbox; in others, they are an integral part of the state's approach. In general, these tools have some importance because they potentially link nonpoint source pollution control to the states' point source control authorities. And they typically provide a wider array of order, abatement, and penalty authorities than either focused nonpoint source programs or older nuisance or misdemeanor-type prohibitions.

DISCHARGE PROHIBITIONS OF NARROWER SCOPE

In addition to the general prohibitions found in most states' water pollution control laws, virtually every state has other - usually older - provisions prohibiting certain kinds of discharges deemed detrimental to the public health or welfare, fisheries, drinking water, or other interests identified by the legislature. Typically misdemeanor provisions, these may nevertheless serve in some instances the important role of providing an enforceable response to a nonpoint source pollution event, or in some cases, threatened pollution event.

Discharge of Listed Substances

Various statutes specifically list detrimental substances whose discharge into the waters of the state is prohibited. These provisions are found most often in public health laws, criminal laws, and fish and game laws. Sometimes they take aim primarily at "litter" that may enter the waters of the state. Other laws seem more concerned with disease-bearing wastes or substances. "Offal, filth, rubbish..." heads a typical list. West Virginia has a typical provision, making it an offense "to place, deposit, dump, or throw, or cause to be placed, deposited, dumped or thrown, any litter...garbage, refuse, trash, can, bottle, paper, ashes, carcass of any dead animal or part thereof, offal, or any other offensive or unsightly matter into any river, stream, creek, branch, brook, lake or pond, or upon the surface of any land within one hundred yards thereof, or in such location that high water or normal drainage conditions will cause any such materials to be washed into any [such waters]." The offense is defined as a misdemeanor punishable by fine of not less than \$50 nor more than \$500. W.V. Code 20-7-8. This study identified similar provisions in Connecticut, Maine, Massachusetts, New Hampshire, New York, Pennsylvania, Florida, Illinois, Indiana, Michigan, Minnesota, Ohio, Arkansas, Oklahoma, Texas, Iowa, and California, although undoubtedly other states have such provisions.

Discharge of Substances Harmful to Fish

Approximately half the states' fish and game codes contain provisions that prohibit the discharge of various substances that are, or that may be, harmful to fish. These provisions do not require proof of injury to fish, but focus on the nature of the substances discharged. This is usually clear from the nature of the prohibition, but it is spelled out explicitly in some laws - for example, "it is not necessary to prove that the violation has actually caused the death of, or damage to, any particular fish" 30 Pa.C.S.A. 2504. Some of these provisions are written quite broadly, while others are narrow.

For example, Kentucky's law provides: "No person shall place or cause to be placed in any public waters any substance that might injure, interfere with, or cause the waters to be unfit for the support of wildlife [including fish]" Ky. Rev. Stat. 150.460(1) (penalty of up to \$500 and/or 6 months). Arkansas law provides that "it shall be unlawful for any person to deposit, throw, drop, or discharge in any manner in any of the waters of this state any substance, liquid, or gas or anything else that will or does intoxicate or stupefy or in any manner injure any fish therein, whether done for the purpose of catching or taking fish or not." Ark. Code Ann. 15-43-317. Rhode Island law provides: "No person shall place, deposit, or explode any substance injurious to the health or life of a fish in any stream or fresh water pond" R.I. Gen. L. 20-11-10. Far more narrowly, Vermont prohibits the deposit of "lime, creosote, coculus indicus or other drug or poison destructive to fish" 10 Vt. Stat. Ann. 4606(b). Given the principles of statutory construction discussed earlier in this chapter, it may be harder to apply this provision to many forms of nonpoint source pollution.

Although many states have provisions of this type, others have drafted them in such a way as to be useless for reaching nonpoint source discharges. For example, contrast Maine's prohibition on the use of any "explosive, poisonous or stupefying substance...for the purpose of taking or destroying any kind of fish." 12 Maine Rev. Stat. Ann. 7617.

State fish and game laws can also provide regulatory authority over pollution discharges in some cases. For example, Massachusetts has an unusual provision that allows the state fisheries agency to determine that a "prohibition or regulation of the discharge of waste or material from any source" is needed for particular inland waters because of the value of the fishery therein, leading to action by the pollution control agency. 131 Mass. Gen. L. 41.

Some states, such as New York and California, use fisheries protection provisions to control nonpoint source pollution of shellfish production areas. For example Cal. Water Code 14950(d) provides that regional water quality boards "shall have primary responsibility for the protection of commercial shellfish harvesting from the effects of point and nonpoint pollution sources." Regulatory authority under the law arises once the area has been downgraded or restricted by the state's Department of Health Services, closed for more than 30 days per year for 3 previous years, or formally determined to be threatened. Cal. Water Code 14954. "Once the

nature, sources, scope, and degree of the pollution affecting a commercial shellfish growing area have been determined, the regional board, with the advice of the local technical advisory committee, shall *order* appropriate remedial action, including the adoption of best management practices to abate the pollution affecting that area." Cal. Water Code 14956(a). However, Cal. Water Code 14956(b) provides that "if *agricultural* sources of pollution have been identified as contributing to the degradation of shellfish growing areas, the regional board shall *invite* members of the local agricultural community representing the type of agricultural discharge affecting the local shellfish growing area, the local resource conserve district, the local soil conservation service.....and affected shellfish growers to develop and implement appropriate short- and long-term remediation strategies that will lead to a reduction in the pollution affecting the commercial shellfish growing area."

Fish Kill Caused by Pollution

Many states also have provisions that prohibit fish kills or that allow enforcement responses to fish kills. Although some of these are simply broadly written prohibitions on killing fish without a valid fishing license, many others clearly proscribe nonpoint source and other discharges that result in harm to aquatic life.

Some of these provisions are similar to those described in the preceding section, but possibly may require proof of injury to fish, not simply discharge of an injurious substance. For example, Puerto Rico's law might be interpreted as falling within either category: "It is prohibited to throw or cause to be thrown or deposited into any...body of water...oils, acids, poisons, or any other substance which kills or destroys fish, crustacea, or mollusca." 12 P. R. Laws Ann. 61. Indiana's law prohibits drainage or placement of material into state waters that causes or contributes to a polluted condition such that "any fish life or any beneficial animal or vegetable life in any waters may be destroyed or propagation thereof prevented or injuriously affected." Indiana Code 13-1-3-8.

Other laws prohibit killing fish by depositing in any "public stream or body of water..any poison, poisonous substance...or other deleterious or poisonous matter" Ala. Code 9-11-93; or they provide that "No fish, other than migratory food fish of the sea in the marine and coastal district, shall be taken except by angling." N.Y. Env. Cons. L. 11-1301(1)("taking" includes killing). States with potentially applicable fish kill laws include at least Massachusetts, New York, Puerto Rico, Maryland (where the harm is from sediment), Alabama, Indiana, Minnesota, New Mexico, Wyoming, and Arizona.

In addition to state laws prohibiting fish kills, including those caused by polluting substances that may be discharged from nonpoint sources, it is also worth noting other state provisions that create explicit liability to the state where an "unlawful" pollution discharge damages fish. These include New Hampshire, Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Kansas, South Dakota, California, Alaska, Oregon,

Washington. Pennsylvania law provides: "The Commonwealth has sufficient interest in fish living in a free state to give it standing, through its authorized agencies, to recover damages in a civil action against any person who kills any fish or who injures any streams or stream beds by pollution or littering." 30 Pa.C.S.A. 2506(a). See N.C. Gen. Stat. 143-215.3 (similar)

Pollution of Drinking Water or Public Water Supply

About a fourth of the states have older provisions specifically aimed at preventing or criminalizing the pollution of a drinking water supply. Typical is Ok. Stat. tit. 11, 37-115: "No person...shall pollute or permit the pollution of the water supply of a municipality, or any stream, pond, spring, lake, or other water reservoir or groundwater aquifer, which is used or which is being held for use as a water supply by a municipality." Compare Minn. Stat. 144.35 "No sewage or other matter that will impair the healthfulness of water shall be deposited where it will fall or drain into any pond or stream used as a source of water supply for domestic use."

Nuisance and Public Health Provisions

All, or virtually all states have statutory provisions that provide for the abatement of nuisances, and many have additional public health provisions that may have some application to particular instances of nonpoint source pollution. The common law of nuisance also applies in every state. Nuisances are of basically two types: public nuisance and private nuisance. Public nuisance is the creation of a condition that causes injury to the public welfare, while private nuisance impairs the use and enjoyment of property. Nuisance is not a fault-based doctrine, but requires only proof of the adverse condition. Thus, even a condition that does not violate any law or regulation may still be abatable as a nuisance. Remedies for public nuisances are typically injunctions for abatement, or authority for a public entity to conduct summary abatement of the nuisance and recover its abatement costs, and/or the imposition of fines - reflecting the historic origins of public nuisance as a quasi-criminal action. Public

nuisance actions may be brought by the state or, often, by any affected entity or person, while private nuisance actions are brought by adversely affected land owners.

Nonpoint source water pollution that impairs the usefulness of waters, adversely affects human health, or impairs the rights of others may be abatable under state nuisance laws. Two types of nuisances are generally addressed by state statutes - first, and more important for most nonpoint sources, are state provisions declaring water pollution to be a nuisance. Such legislative declarations limit the need to prove particular deleterious effects in order to secure relief. Second, are state provisions that provide for the abatement of conditions dangerous to public health or otherwise noxious or offensive to the senses.

Alabama law combines both approaches in one provision: "Any and all pollution is hereby declared to be a public nuisance and, if it creates, or is about to create, a health hazard, shall be subject to immediate control of the commission by order or injunction." Ala. Code 22-22-9(I)(4). This provision both declares water pollution a nuisance making it subject to injunctive relief by the state or any person, and declares that particular kinds of water pollution (health hazards) are subject to certain kinds of administrative relief and summary abatement action. Pennsylvania law provides a typical, but especially complete, version of the "water pollution as nuisance" provision: "The discharge of...any substance into the waters of this Commonwealth, which causes or contributes to pollution...or creates a danger of such pollution is hereby declared not to be a reasonable or natural use of such waters, to be against public policy and to be a public nuisance" and "shall be abatable in the manner provided by law or equity for the abatement of public nuisances." 3 Purdon's Stat. 691.3, 691.601. Minnesota's provision is given additional detail in state regulations, making its applicability to nonpoint discharges explicit: "No sewage, industrial waste or other wastes shall be discharged from either point or nonpoint sources into any waters of the state so as to cause any nuisance conditions, such as the presence of significant amounts of floating solids, scum...excessive suspended solids, material discoloration...undesirable slimes or fungus growths, aquatic habitat degradation, excessive growth of aquatic plants, or other harmful effects" Minn. Rules 7050.021.

Some laws more directly reflect the historic petty criminal nature of water pollution as a nuisance. Cal. Penal Code 374.4(a) provides: "Every person who...dumps or causes to be dumped, any waste matter into any bay, lagoon, channel, river, creek, slough, canal, lake, or reservoir, or other stream or body of water, or upon a bank, beach, or shore within 150 feet of the high water mark of any stream or body of water, is guilty of a misdemeanor" and imposes a fine of \$100-1000. A few states have even older provisions, like Kentucky Rev. Stat. 438.060, which makes it a violation for any person to place or cause to be placed "in any stream, dam, pool or pond" any substance that renders the water "unfit for use or produces a stench," punishable by fine of not less than \$10 nor more than \$100 and/or imprisonment for 30 days to 6 months. Ohio Rev. Stat. 3767.13(C): "No person shall...corrupt or render unwholesome or impure, a watercourse, stream, or water." This is a misdemeanor punishable by up to 60 days and/or \$500.

General nuisance law is typified by Minn. Stat. 561.01: "Anything which is injurious to health, or indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property, is a nuisance." Some states have made the connection to public health abatement explicit. For example, Kansas's Secretary of Health and Environment and county boards of health can examine all "nuisances, sources of filth and causes of sickness"..."When such source is found to exist on any private property or upon any watercourse in the state" they have the power to order the owner to remove the nuisance within 24 hours. Failure to obey an order is punishable by a fine of \$10 to \$100. Kan. Stat. Ann. 65-159.

Nuisance laws are generally not preempted by state regulatory laws; however, a number of states have expressly enacted savings clauses to preserve public and private nuisance actions for abatement of water pollution (e.g., Ala. Code 22-22-9(o)).

Virtually every state has enacted "right to farm" legislation exempting agricultural activities (and in a few states, silvicultural activities) from abatement as a nuisance. These laws vary in the extent of the exemption. All of them are clearly aimed at preventing private nuisance actions occasioned by recent suburban dwellers encountering the odors and noise of normal farming operations, but some are broader and apply to public as well as private nuisance actions and to a wider array of conduct. Most also provide that the exemption from nuisance liability does not apply where the agricultural activity is conducted in violation of law, or negligently, or (in some cases) where the nuisance alleged is water pollution. The following selected state laws give an idea of the scope of these ubiquitous laws.

Delaware has a typical right to farm provision: "No agricultural or forestal operation...which has been in operation for a period of more than 1 year shall be considered a nuisance, either public or private, as the result of a changed condition in or about the locality where such...operation is located. This section shall not apply when the nuisance is determined to exist as the result of the negligent or improper operation...or when such operation is being operated in violation of state or federal law or any local or county ordinance." 3 Del. Code 1401.

New Hampshire agricultural operations cannot be found a nuisance if they were in operation for one year or more and were not a nuisance when operations commenced; however this exception does not apply if operations are "injurious to public health or safety" N.H. Rev. Stat. Ann. 432.33, nor if the nuisance results from "negligent or improper operation". N.H. Rev. Stat. Ann. 432.34. But operations "shall not" be found negligent or improper" if they are obeying all laws. Thus, New Hampshire agricultural operations are exempt from nuisance actions unless they create a public health hazard, or they are violating an explicit legal requirement. Michigan law provides that a farm operation is not a nuisance if it "conforms to generally accepted agricultural and management practices according to policy determined by the Michigan commission of agriculture" Mich. Cons. L. 286.473.

Idaho law goes farther by exempting not only agriculture but also agricultural processing

operations and forestry activities from nuisance actions; the law also preempts local regulation of such activities, declares the right to conduct forest practices a "natural right" and has an exception only for "improper or negligent operation" - defined as operations not in compliance with law and adversely affecting public health and safety. Idaho Code 22-4501 and 38-1401.

New York exempts agricultural activities only from *private* nuisance actions, and subjects the exemption to various exceptions for increased activities and activities causing conditions dangerous to life or health. N.Y. Pub. Health L. 1300-c. California's right to farm nuisance exemption specifically provides that it "shall not invalidate " provisions of the state's Health and Safety Code, Fish & Game Code, Food & Ag. Code, or Porter-Cologne Water Quality Act that declare such an activity a nuisance "specifically defined or described in any of those provisions."

Some states' right to farm provisions specifically do not protect agricultural operations from nuisance claims based on water pollution. e.g., Hawaii Rev. Stat. 165-2, Ark. Code Ann. 2-4-106, Iowa Code Ann. 176B.11, N.D. Cent. Code 42-04-03.

ENFORCEMENT AND SANCTIONS

Most general discharge prohibitions under state water pollution control laws are enforceable by administrative orders, civil injunctions, civil penalties in the \$10,000 to \$25,000 range, criminal sanctions and other sanctions. This is why determining whether these authorities can be applied (particularly in the absence of an adopted permitting program for nonpoint sources) can be extremely important to a state effort.

Most of the discharge prohibitions based on other statutes are enforceable as petty criminal offenses and through abatement orders or injunctions.

These distinctions are important, not only because of their potential effectiveness in changing behavior, but also because they affect issues of process and issues of proof. For example, while proving that a discharge was of a "waste" or that it caused "pollution" presents one set of difficulties in a civil or administrative context, proving an offense in a criminal case (even in a magistrate's court) can present additional hurdles. Can the state show that the discharge was of a "deleterious substance" harmful to fish "beyond a reasonable doubt" and that the act occurred with the requisite intent? And is this even worthwhile if the sanction is \$500? On the other hand, if an offense is criminal, even if petty, does this provide sufficient practical effect to bring about compliance and the deterrence of others? State discharge prohibitions come in many types, often presenting complex issues for prosecution or enforcement in the nonpoint source context.

Chapter Three:



Nonpoint Source Operational Requirements

The major enforceable mechanisms for nonpoint source pollution in the states are found in programs enacted specifically for the purpose of controlling such pollution, and in the recent extension of state stormwater permitting programs, state agricultural incentive programs, and state forestry programs into the area of enforceable controls.

SEDIMENTATION AND EROSION LAWS

Numerous states have enacted enforceable erosion and sediment control laws. Some of these are broad and cover an array of conduct across different sectors (from urban to agriculture), while others are closely linked to, or limited to, NPDES controls on urban and industrial stormwater. This section discusses a number of representative statutes to illustrate the scope of these authorities.

Some states have broad enforceable authorities applicable across the state to a variety of activities. For example, in Ohio, the law provides for control of erosion for all land disturbing activities. Somewhat different provisions apply for earthmoving associated with nonfarm activities than for agriculture and forestry, but all are subject to the control requirements. Nonfarm development activities involving disturbance of soils require an "erosion and sediment control plan" that must be approved by the state or local approving agency. Ohio Rev. Stat. 1511.02(E). Hawaii requires county ordinances to control soil erosion and sediment from "land disturbing activities"; the standards are met if the land is managed in accordance with practices acceptable to the local soil and water conservation district. Hawaii Rev. Stat. 180C-1 et seq.

Pennsylvania's program is established by regulation rather than by statute, and applies to a variety of earth-disturbing activities. This program, which is delegable to counties and local governments, requires erosion and sedimentation plans for all earthmoving activities. 25 Pa. Code Chap. 102. Permits are required for disturbances of 25 acres or more, or other size disturbances as set by regulation (note that the program is not limited to urban areas); and notice is required for all building permit activities affecting 5 or more acres. A control plan *is* required for agricultural plowing and tilling, but it is prepared by the landowner, rather than by a professional, and a permit is not required. 102.4(b).

Many of these laws exempt agriculture, either because other enforceable authorities apply, or because agriculture is addressed by incentive or voluntary mechanisms. For example, Maine requires activities, other than agriculture, displacing or exposing soil to implement measures "to prevent unreasonable erosion of soil or sediment beyond the project site" or into a stream, wetland, or other protected area. 38 Maine Rev. State. Ann. 420-C. Georgia's Erosion and Sediment Act requires counties and municipalities to implement comprehensive ordinances for all land disturbing activities, including enforceable BMPS. Ga. Rev. Stat. 12-7-6, -7. It exempts agricultural operations, Department of Transportation projects, and projects 1.1 acres or less from permit requirements Ga. Rev. Stat. 12-7-17. Virginia's Erosion and Sediment Control Law requires local jurisdictions or conservation districts to adopt a program requiring submittal and review of an erosion and sediment control plan, but does not apply to agriculture. Va. Code 10.1-563

Others exempt both agriculture and forestry, sometimes with conditions. For example, New Hampshire requires a permit to "significantly alter terrain" in or on the border of surface waters, but excludes "normal agricultural operations", and accepts timber operations' undertakings to implement BMPs as sufficient to satisfy the requirement. N.H. Rev. Stat. 485-A:17. North Carolina's Sediment Pollution Control Act is a state program, delegated to local governments; it requires approval of erosion control plans for covered activities. It does not apply to agriculture, nor to forestry activities conducted in accordance with BMPs. N.C. Gen. Stat. 113A-50 et seq. South Carolina has one Erosion and Sediment Reduction Act that applies only to activities on state lands S.C. Code 48-18-10; and a separate Stormwater Management and Sediment Reduction Act, 48-14-10, that applies to privately owned lands not owned by the state; the latter law exempts both agriculture and forestry. Michigan law requires permits for earth disturbing activities only within 500 feet of a lake or stream, but the law does not apply either to forestry nor to "plowing, tilling and harvesting." Mich. Codified L. 324.9115. Iowa requires a signed affidavit for earthmoving activities that soil loss limits will not be exceeded, but the law does not apply to tilling, planting, or harvesting of agricultural or forestry crops, nor to areas smaller than 25,000 square feet. Iowa Code Ann. 161A.64.

Delaware's law is fairly typical of state sediment and erosion laws: "[U]nless exempted, no person shall engage in land disturbing activities without submitting a sediment and stormwater management plan to the appropriate plan approval authority and obtaining a permit to proceed" 7 Del. Code 4003. Based on certain criteria, a person may be required to provide the plan for construction review by a state-certified reviewer. 7 Del. Code 4013. 7 Del. Code 4011(a) provides that watersheds proposed by a conservation district, county, municipality, or state agency and approved as "designated" shall have "regulatory requirements clearly specified through a watershed approach to nonpoint pollution control or flood control. The watershed approach shall result in a specific plan, developed or approved by the Department [of Natural Resources and Environmental Control]" The plan then governs all specific projects thereafter in the watershed. A regulation exempts construction projects disturbing less than 5,000 square feet. Del. Reg. SS 3.1B. Commercial forestry activities were exempted from the Delaware law by a 1994 amendment, 7 Del. Code 4002(3); and the law does not apply to agricultural land

management unless the state agency determines that the land requires a new soil and water conservation plan and the operator has refused to seek one from the soil and water conservation district. 7 Del. Code 4004(a).

Some laws are more explicitly aimed at urban and construction site activities. For example, in addition to the erosion law noted above, Maine has a "site location of development law" 38 Maine Rev. Stat. Ann., directed at controlling pollution from these development sites. Minnesota requires a sediment control plan for "development activity" disturbing over acre of land. Minn. Stat. 103F.441. Other state laws particularly emphasize the involvement of local governments. E.g. Georgia Rev. Stat. 120707. Some states have laws that do little more than what is required to cover stormwater discharges from urban and industrial sources under the federal Clean Water Act, limiting their coverage to those sources.

A number of states integrate sediment and erosion control, and other forms of nonpoint source pollution controls into broad state *planning* requirements that are binding on local governments which must adopt and enforce them. Massachusetts, Rhode Island, Vermont, Florida, Georgia, Oregon, Washington, and California, among others, contain such mandates in their laws. For example, Cal. Govt. Code 65302, 6580, 66411 provisions on planning, zoning and subdivision contain provisions such as "The [subdivision] ordinance shall specifically provide for property grading and erosion and control, including the prevention of sedimentation or damage to offsite property." Not only is the local ordinance enforceable, but both the adoption of the underlying plan by the local government, and the adoption of the site plan approval for a particular subdivision are subject to enforceable review under the California Environmental Quality Act (CEQA), Cal. Pub. Res. Code 21000 et seq., which contains its own requirements for avoidance of harm and mitigation of unavoidable impacts.

Other approaches used by the states are explicitly targeted to water resources of particular value or concern. Only a few examples are noted here, but almost every state has some version of these targeted authorities. For example, Maine provides for mandatory shoreline zoning, and special permits for construction adjacent to waterways and other natural resource protection areas. Maryland and Virginia have adopted Chesapeake Bay protection laws that require the enactment of local land use regulations, buffer zones, and other controls in jurisdictions tributary to the Bay. California's San Francisco Bay Conservation and Development Commission Act likewise provides for coordinated permitting requirements. South Carolina provides for special protection areas under its Stormwater Management and Sediment Reduction Act: "In addition to the other regulatory requirements in this chapter, designated watersheds shall have the regulatory requirements for land disturbing activities with the watershed clearly specified through a watershed management plan which includes nonpoint source pollution control, stormwater management, and flood control components." S.C. Code 48-14-130. New Jersey expressly requires areawide waste treatment planning in areas designated by the state, including the adoption of a regulatory program to control point and nonpoint sources of pollution, using the enforcement powers of the county boards of freeholders; in effect, the law promotes the use of enforceable mechanisms as necessary to implement Clean

Water Act planning. N.J. Stat. Ann. 58:11A-4, -5. Coastal states, in particular, frequently have these authorities applicable to activities occurring in the coastal zone or in waters immediately tributary thereto.

There are many other state laws that address the issues of planning and operational requirements for earth-disturbing activities. Indeed, the great bulk of regulation is at the local level -- either pursuant to explicit state delegations of such authority under a sediment and erosion control law, or pursuant to local powers granted by a state planning and zoning code or home rule charter. This section of this report does not list all of the state laws, nor even one law for each state. Rather, its purpose has been to summarize the kinds of laws that are in operation, and their typical provisions, exceptions, and processes.

In summary, (1) a limited number of states have a broad erosion and sediment control law that reaches both urban earthmoving and rural activities, (2) far more states exempt agriculture from such laws, and a significant number exempt both agriculture and forestry, or subject the latter activities to a more limited set of requirements (such as various uses of BMPs), and (3) much of the relevant legislation or regulation applies on a watershed basis to protect particular water bodies. Indeed, watershed-oriented approaches are extremely important, as they enable states to draw upon unique authorities enacted for river basin commissions, wild and scenic rivers programs, wetland programs, bay and estuarine programs, coastal programs and the like. It is these programs that most frequently employ permitting requirements, buffer zones, and enforceable obligations linked to planning goals.

FORESTRY ORIENTED REQUIREMENTS

States have used a variety of approaches in dealing with nonpoint source pollution from forest practices. While a significant number rely on their general discharge prohibitions as a back-stop to voluntary programs or incentives, states have also enacted more focused and enforceable requirements aimed at prevention of pollution from forest practices.

Comprehensive Statewide Forest Practices Acts

The most comprehensive approaches are found in those states that regulate most forest practices on private lands. These states, mostly on the west coast and New England, have enacted comprehensive forest practices acts. These acts typically require planning for timber harvests, review of submitted plans, use of prescribed forest practice standards or BMPs, monitoring, and enforcement. California's Z'Berg-Nejedly Forest Practices Act, Pub. Res. Code 4511 et seq., divides the state into three districts with rules established by the state board of forestry - including detailed rules for protection of water resources. The required timber harvesting plan must include erosion and pollution control measures that conform to the regulatory standards. Cal. Pub. Res. Code 4581. Nevada's forest practices law provides that permits for logging must include BMPS for nonpoint sources. Nev. Rev. Stat. 528.042, Nev.

Admin. Code 445.340. Massachusetts requires operators to file timber harvesting plans which must incorporate state forestry standards. 132 Mass. Gen. L. 42. Connecticut also has comprehensive state standards; and it allows forest practice regulation by municipalities if consistent with and approved by the state. Conn. Gen. Stat.23-65j, -65k. Maine's Forest Practices Act imposes requirements for clearcuts, including management plans for clearcuts in excess of 50 acres, that must provide for protection of water quality and minimization of erosion. 12 Maine Rev. Stat. 8867-8869.

Alaska's forest practices law authorizes the issuance of nonpoint source regulations by the commissioner of natural resources subject to the approval of the commissioner of environmental conservation, Alaska Stat. 41.17.055. The law requires a detailed plan of operations required, 41.17.090, including protection of riparian areas. 41.17.115(b). Idaho law provides for rules, practices, and BMPs, and requires a forest operator to post a required notice of intent and agreement to comply. Idaho Code 38-102 et seq. But some specific Idaho forest regulation relating to stream segments of concern were repealed and replaced by the general nonpoint source authority regarding impaired waters discussed in the general discharge prohibition section.

Oregon law requires forest operators to comply with BMPs, unless they can demonstrate to the state's satisfaction that alternative practices will achieve a better result, Ore. Rev. Stat. 527.724, 527.765. The law requires detailed plans for forestry operations in certain conditions, including within 100 feet of stream, notice of chemical use, and other practices. Ore. Rev. Stat. 527.670. Washington classifies forest practices

by their potential to damage public resources, and imposes enforceable notification, application, and planning requirements. Wash. Rev. Code chap. 76.09.

Enforcement mechanisms under these comprehensive laws include loss of permits, civil and criminal penalties, orders and injunctions, and professional licensing and disciplinary actions.

Other Laws Imposing Forest Standards

Broad and comprehensive forest practices laws are not the only enforceable approaches used by states to address nonpoint source pollution from forest practices.

Ohio's erosion control laws, under Ohio Rev. Stat. 1511.02(E), are carried out by soil and water conservation districts with state oversight, Ohio Rev. Stat. 1515.08. The rules must establish "technically feasible and economically reasonable standards to achieve a level of management and conservation practices in farming or *silvicultural* operations that will abate wind or water erosion of the soil or abate the degradation of the waters of the state by animal waste or by soil sediment including substances attached thereto" and include plans, enforcement orders and sanctions. 1511.02(E). Vermont's general land use statutes contain planning and implementation elements - specifically applicable to forestry - that must be implemented by local jurisdictions and that are enforceable by those jurisdictions.

Montana's law provides for protection of streamside management zones in the conduct of forestry operations. Mont. Code Ann. 77-5-301 et seq. Michigan law provides for best management practices and enforceable standards, but only in forested regions that have been designated "forest improvement districts." Mich. Code L. 324.50101. Alabama's statute gives broad authority to the Forest Commission "to adopt and promulgate rules and regulations pertaining to all phases of forestry within this state, which rules and regulations when adopted shall have the force and effect of law", Ala. Code 9-3-9, but the commission has not adopted enforceable standards.

Particular limitations and requirements applicable to forest practices within certain distances of shoreland, rivers, or water bodies are more common. Often these limit the distance within which cutting may occur or require the retention of a certain percentage of trees or vegetation, as in Maine, for example. Wetland requirements can also be significant; for example, New Hampshire regulations, Env-Wt 304.05, require the use of BMPs in such settings. Maryland law requires retention of buffers in Chesapeake Bay critical areas, and the preparation of plans; implementation of BMPs is also required for timber harvests in Maryland nontidal wetlands. In Virginia, forestry operations are exempt from the limits enforceable in the Chesapeake Bay Preservation Areas, but only if they fully implement required BMPs under the forestry law. In many states, forestry practices are regulated when they are within wetlands, within specific watersheds, or within a fixed distance of a water body, even though they may be

unregulated in most of the state.

Some forest-oriented laws linked to a water quality objective may, even if enforceable, only have limited impacts on water quality. For example, the Mississippi Forest Harvesting Law, although it states a policy "to prevent soil erosion and consequent silting of stream channels and reservoirs; to protect watersheds and reservoirs and to insure at all time an adequate supply of water..." merely contains requirements that certain numbers of trees be left on each acre for growing stock or seed trees. Miss Code 49-19-51. Water quality is primarily addressed through voluntary silviculture BMPs.

Forestry Bad Actor Laws

Rather than impose a statewide enforceable standard for forest practices, or even a watershed based set of standards, a number of states have enacted authorities that enable state regulatory agencies to respond to pollution-causing events by directing forest operators to implement specific practices. These laws are often referred to in the nonpoint source context as "bad actor" laws, because they impose obligations only on those operators who have already committed - or are in the process of committing - bad acts. (This use of the term "bad actor" should not be confused with the more common use of the term in environmental law to refer to laws that require agencies to deny new permits to entities with histories of noncompliance - see, e.g., Western Organization of Resource Councils, *Bad Actor Statutes: What They Are and How to Pass Them* (1994)).

Only a few states have nonpoint source bad actor statutes. These bad actor statutes represent a different approach to nonpoint source pollution than the more regulatory-oriented approaches to forestry described in the preceding sections. Under the bad actor laws, the operator has no prior obligation (other than not to pollute), and the enforcement response tools are more limited than under comprehensive forest practices laws. Nonetheless, bad actor provisions provide a clear enforcement response which may, in many cases, be easier to use than the general discharge prohibitions summarized in chapter two.

Delaware's bad actor provision begins by providing for a graduated approach to silvicultural water pollution. If the Forestry Administrator determines that a person is conducting "silvicultural activity in a manner which is causing or likely to cause pollution" the Administrator "may advise the owner or operator of corrective measure needed to prevent or cease the pollution." 7 Del. Code 2979. However, if the operation "is causing or is likely to cause alteration of physical, chemical or biological properties of any state water, resulting from sediment deposition presenting an imminent and substantial danger to" the public health, safety or welfare, or the health of animals, fish or aquatic life, to a public water supply, or to other reasonable uses of the water, the Administrator has authority to issue "special orders" requiring the cessation of relevant activities and implementation of corrective measures. 7 Del. Code 2980. An order may not be issued if the operator is implementing approved BMPs and the pollution

was caused by "unusual weather events which could not have been reasonably anticipated."

Virginia has a very similar forestry bad actor statute. The Virginia State Forester may issue special order, after hearing, where a silvicultural activity is causing or is about to cause pollution. No special order may be issued if BMPs were being followed and such techniques failed to prevent pollution if the pollution was caused by "unusual weather events which could not have been reasonably anticipated" Va. Code 10.1-1181.2. An emergency order, without a prior hearing, is authorized if the situation so requires.

West Virginia authorizes the director of the division of forestry to issue a written compliance order upon finding that "failure to use a particular best management practice is causing or contributing, or has the potential to cause or contribute, to soil erosion or water pollution." W.V. Code 19-1B-5. The director may issue an order for immediate suspension of work if the circumstances present a danger to life or threaten to result in uncorrectable soil erosion or water pollution.

New Hampshire's Division of Forests and Lands has the power to issue cease and desist orders to "temporarily suspend logging or other operations in forest areas when the director determines that such actions have resulted in, or are likely to result in, pollution of surface water or groundwater." N.H. Rev. Stat. Ann. 227-J:II(d), but the order simply suspends operations pending action by Department of Environmental Services, which must determine what action to take under other legal authorities.

Other Enforceable Forestry Tools

A number of states require the licensing of foresters, logging supervisors, or logging personnel. While such schemes do not directly result in the control of nonpoint source water pollution, the licensing requirements include testing, continuing education, and other means to increase familiarity with BMPs and other appropriate techniques to avoid water pollution. The states with such provisions include, among others, Connecticut, Massachusetts, New Hampshire, Rhode Island, West Virginia, Alabama, Georgia, South Carolina, and California. However, these were not comprehensively collected and identified.

Many states have tax breaks contingent on the adoption and implementation of forest management plans. In general, these plans are not defined as enforceable mechanisms within the scope of this study. Typically, the only consequence of violating a plan or ceasing to carry it out is loss of the tax break and some recapture of the taxes avoided in the preceding years (e.g., Maine, Indiana, Wisconsin, Missouri). However, Michigan's provision appears to be enforceable as it includes provisions not merely limited to loss of tax status and recapture, but criminal sanctions available under some circumstances. Mich. Cons. L. 324.51101, 324.51120.

AGRICULTURE REQUIREMENTS

Statewide Erosion Control Requirements

Several states have adopted enforceable requirements for control of erosion from agricultural lands. Some of these also address agricultural nutrients as part of the same planning and enforcement process. Vermont prescribes "accepted agricultural practices" which must be implemented across the state. These practices provide an enforceable baseline standard, above which BMPs may be imposed in specific places but only in accordance with limiting authority discussed below. Vt. Stat. Ann 4810.

Maryland prohibits agricultural discharge of sediment into the waters of the state except in accordance with approved soil and water conservation plans. Md. Code Ann. Envir. 4-413. New York law requires "every owner or occupier of agricultural land" - defined as 25 or more acres and certain smaller concentrated operations - to apply to the local soil and water conservation district for "a soil and water conservation plan for the land" and requires such districts to prepare such plans. N.Y. Soil & Water Cons. Dist. L. 9(7-a). These requirements are enforceable; however, the law does not make implementation of the required plan enforceable.

Ohio, as previously described, requires all of its soil and water conservation districts to adopt regulatory BMPs and enforceable plans for agriculture to control erosion and sedimentation. The Ohio law's enforceability is subject to one limit; if an order requires installation of a pollution abatement practice eligible for a cost share, it cannot be enforced against the operator unless 75% cost-share funds are actually available. Ohio Rev. Stat. 1511.02. Nebraska's law is similar in several respects. It requires all natural resource districts to adopt programs for erosion and sediment control. Neb. Rev. Stat. 2-4605. If there is a complaint about soil erosion, the district first seeks an agreed plan with the owner; if there is no agreement, then an enforceable order is issued. However, it is enforceable only if at least a 90 % cost share is available. Neb. Rev. Stat. 2-4608.

Kentucky requires the development of "statewide water quality plans to address identifiable water pollution problems from agricultur[al] operations" of 10 or more acres. The prescribed requirements must be implemented by farmers within five years. Ky. Rev. Stat. 224.71-100 to -145. Conducting an agricultural operation in violation of the plan in a manner which results in water pollution is a violation of law; failure to comply after receipt of written notice and provision of technical assistance and financial assistance "when possible" renders a person a "bad actor" subject to a civil penalty not to exceed \$1000. Ky. Rev. Stat. 224.71-130. In a geographically targeted approach, Oregon's Agricultural Water Quality Management Act authorizes the state's Department of Agriculture to adopt enforceable rules to effectuate water quality management plans adopted to implement TMDLs, where needed to achieve compliance with water quality standards. Ore Rev. Stat. 568.909, .912, .930.

Some states with different substantive scopes for their statewide regulation of agriculture also rely on local soil and water conservation districts for implementation and enforcement. For example, Hawaii requires all county ordinances to control soil erosion and sediment from "land disturbing activities" but deems these standards met if land is managed in accordance with practices acceptable to the local soil and water conservation district. Hawaii Rev. Stat. 180C-1, 180C-2. Michigan, which exempts "plowing, tilling, and harvesting" from its statewide soil erosion and sediment control program, does apply the law to other agricultural practices; the soil conservation districts may implement the law under state rules. Mich. Cons. L. 324.9109.

State Law Bad Actor Requirements

Some states have enacted agricultural nonpoint source enforcement authorities designed to remedy particular problems after the fact. Some of these resemble the forestry bad actor provisions described above.

In a new law, effective in 1997, Virginia authorizes the state to investigate and if "substantial evidence exists to prove that an agricultural activity is creating or will create pollution" then the Commissioner of Agriculture and Consumer Services must notify the operator and require an "agricultural stewardship plan" to be submitted within 60 days. Upon approval by the conservation district the activity may continue, and the plan must be implemented. Enforcement occurs if the plan is not implemented. Va. Code 10.1-559.1-.7.

Wisconsin provides that the state may order abatement of nonpoint source agricultural pollution, requiring use of BMPs and corrective action; but the law limits the state's capacity to address agriculture in priority watersheds unless the source has been designated as a critical site in the relevant plan. Also, the state must allow one year for compliance, and may be overruled by the county land conservation committee. Wis. Stat. 281.20.

Texas has a more limited requirement. It authorizes the state soil and water conservation board to establish a water quality management certification program where

nonpoint agricultural pollution is occurring. If there is a violation, the state board is to prescribe a corrective action plan. If corrective action is not taken, then the matter is referred to the Texas Natural Resources Conservation Commission for action using its other authorities. Vern. Tex. Code Ann. Agriculture 201.026.

A number of other states have somewhat similar authority to remedy agricultural contamination of groundwater. Some of these laws are discussed below under agricultural nutrients.

Conservation District Authorities

Most states with statewide enforceable authorities specifically integrate soil and water conservation districts into the planning, administration, and enforcement scheme, as has been evident from the statewide programs discussed above. This section discusses those states where such districts have the option, but not the obligation, to adopt enforceable land use regulations on their own.

Most states have recognized conservation districts (which go under a variety of names) under state law. In some states, these districts must be organized, and, in the aggregate cover the entire area of the state. In others, they exist only where specifically organized. Most conservation districts only have the power to develop erosion control and related measures and to encourage their adoption via education, persuasion, cost sharing, and voluntary programs.

A few states, however, allow the districts to adopt binding and enforceable land use regulations "in the interest of conserving soil and soil resources and preventing and controlling soil erosion" e.g., Tenn. Code Ann. 43-14-219; N.D. Cent. Code 4-22-27; Ark. Code Ann. 14-125-501; S.Dak. Codified L. Ann. 38-8A-11; Utah Code Ann. 17A-3-806 (17A-3-807 makes them enforceable). Although found mostly in the South and the northern plains states, conservation district authority to adopt enforceable land use regulations is also provided in Puerto Rico's law: "Land regulations adopted pursuant to this section shall have the force and effect of law in the said district and shall be binding upon all occupiers of lands within such district." 5 P.R. L. Ann. 246. In a number of states these enforceable district regulations can apply to silviculture as well as to agricultural activities.

In some states that authorize districts to make enforceable rules, such rules can only be adopted after a referendum and subsequent approval by the district board, e.g., Ala. Code 9-8-26; Georgia Rev. Stat. 2-6-35; Ky. Rev. Stat. 262.350-.390; W. Va. Code 19-21A-9; N.C. Gen. Stat. 139-9; S.C. Code 48-9-1510; Tenn. Code Ann. 43-14-219; 70 Ill. Cons. Stat. 405/23; Vern. Tex. Code Ann. Agriculture 201.121; 3 La. Rev. Stat. 1209; Mont. Code Ann. 76-15-701. Most of the states that require a referendum also require a super-majority for adoption of such regulations. The requirements range from approval by at least 2/3 of the landowners in Tennessee, North and South Carolina, and Louisiana, to 3/4 in Illinois, 4/5 in Alabama, and 9/10 in Texas and Kentucky. Alabama law makes it clear, as does the law of at least one other state, that the district's board of directors is free to decline to adopt regulations even if they have been approved by the requisite number of voters.

In a variation on the approach that allows conservation districts to elect to adopt enforceable regulations, Nevada authorizes conservation districts to petition the state conservation commission to formulate land use (erosion prevention and control) regulations for the district. Nev. Rev. Stat. 548.410.

Such "local option" regulation of agriculture occurs in a few other forms. Wisconsin law allows such regulation by a county, city, village, or town, which may enact "an ordinance...[that] may prohibit land uses and land management practices which cause excessive soil erosion, sedimentation, nonpoint source water pollution, or storm water runoff." Wis. Stat. 92.11. In Oklahoma, county commissioners may issue orders to halt soil erosion and drifting soil. Ok Stat. tit. 82, 521

Agricultural nutrients

Enforceable regulation of agricultural nutrients presents a mixed picture. Enforceable authorities most commonly include concentrated animal feeding operation (CAFO) regulations similar to the federal requirements, but with variations on the number of animals, or with the addition of siting requirements. However, some states have also adopted "accepted agricultural practice" requirements, or nutrient regulations, that are enforceable. Most states also have laws regulating fertilizers, but only to ensure their content and efficacy; only a few have provisions that address misapplication of fertilizers or nonpoint source water pollution resulting from such application.

Enforceable state laws that relate to CAFOs expand on federal requirements in at least three ways. The following examples will illustrate the approaches without analyzing the regulations of every state. Some states provide siting requirements and limitations. For example, North Carolina regulates the siting of certain hog operations. N.C. Gen. Stat. 106-800 et seq. South Dakota regulates the siting of CAFOs over shallow aquifers in a law applicable to operations commenced after July 1, 1997. S.Dak. Codified L. Ann. 34-3A-24. Wyoming enacted a new law in 1997 applying siting and bonding requirements to new confined hog

operations. Iowa has both siting requirements and regulatory provisions; in addition its law expressly provides that permits must be denied if an enforcement action is pending, and for at least five years after the last violation of a habitual violator. Iowa Code Ann. 455B.161, .171-173

Other laws link the development of enforceable nutrient management plans either to the existence of CAFOs or to the threat of nutrient pollution to waters. For example, Pennsylvania requires the development of enforceable nutrient management plans for all "concentrated animal operations," and for other agricultural operations causing violations of the state's Clean Streams Law. 3 Purdon's Stat. 1706. West Virginia provides for CAFO permit requirements in accordance with the Clean Water Act, but also authorizes the commissioner of agriculture to develop mandatory BMPs for the application and use of fertilizers and manures upon having evidence of groundwater pollution that could be effectively prevented with BMPS. 61 C.S.R. 6C. Other state laws deal with animal wastes by incorporating them into enforceable programs for control of agricultural practices. Vermont requires compliance with "accepted agricultural practices" but allows the enforceable imposition of stricter BMPs on a case-by-case basis; however, BMPs may be ordered only if financial assistance is provided. 6 Vt. Stat. Ann. 4810. Ohio's broad nonpoint source program requires soil and water conservation districts to impose BMPs to "abate the degradation of the waters of the state by animal waste or by soil sediment including substances attached thereto", but the law expressly provides that these measures may only regulate animal excrement to the extent to which it is from a concentrated animal feeding operation. Ohio Rev. Stat. 1511.02. Florida regulates CAFOs similarly to federal requirements, but also has special requirements for dairy farms in the Lake Okechobee drainage basin, including a requirement to fence all dairy cattle out of watercourses, requirements for setbacks, and regulation of land application. Fla. Admin. Code 62-670.500.

Another approach regulates operations of different sizes than the federal CAFO definition. Mississippi, for example, uses the federal definition for water pollution control permitting, but smaller CAFOs must file a required "treatment design worksheet and request for site inspection;" the regulations also impose some siting limitations. Miss. Wastewater Regs. - Perm. Applic. C.2, C.3, C.4. In addition to permitting of CAFOs, Kansas provides for registration of facilities with an animal unit capacity of 300 to 999 prior to operation, and authorizes registration of even smaller facilities. The registration is used to determine the need for any significant water pollution potential or separation distance requirements. If such requirements are identified, then a permit is required. Kan. Stat. Ann. 65-171d. Some states have identified kinds of operations for particular regulation. For example, Connecticut requires permitting and enforceable "acceptable management practices" for intensive poultry operations (defined as more than 20,000 fowl). Conn. Gen. Stat. 22-323a, 22-326d-f. State authorities do, however, frequently track or only modestly expand upon the federal requirements. Oregon's law providing for CAFO permitting explicitly limits the reach of permit requirements by providing that such permits may contain "only those conditions necessary to assure that wastes are disposed of in a manner that does not cause pollution of the surface and ground waters of the state." Ore. Rev. Stat. 468B.215.

Apart from laws directed at animal wastes, states have other laws designed to deal with nonpoint source pollution from agricultural nutrients, including both wastes and fertilizers. Several states provide for enforceable requirements where such material threatens groundwater or surface water pollution. Nebraska's natural resource districts prescribe necessary requirements; if groundwater contamination occurs from a nonpoint source, then they must consider whether to adopt an "action plan" enforceable by cease-and-desist orders and sanctions. Neb. Rev. Stat. 46-656.05. Michigan's groundwater protection program also provides for protection against nitrate pollution, and allows the control of application rates, locations, and other practices. Mich. Cons. L. 324.8512. Montana's Agricultural Chemical Groundwater Protection Act authorizes the state to adopt enforceable management plans enforceable by orders, injunctions and sanctions, where agricultural chemicals are found in groundwater. Mont. Code Ann. 80-15-101 et seq. Arizona has provided for the development of agricultural general permits for "regulated agricultural activities" defined as "application of nitrogen fertilizer or a concentrated animal feeding operation." Enforceability is through the water pollution law, but the first response prescribed is the replacement of the general permit with an individual permit. Ariz. Rev. Stat. 49-247, 49-201.29.

An interesting "enforceable" program that operates collectively in a watershed is a Florida requirement designed to reduce phosphorous loadings in the Everglades region. The law provides for a scheduled phased-in increase in agricultural taxes over the course of a long period (until the year 2013), but if the collective loadings are reduced by certain targets, agricultural operators do not have to pay the scheduled increases; in addition, part of the program provides individual credits against these taxes for operators that take action themselves on identified parcels. While this program is unlike most regulatory and liability-based enforceable mechanisms discussed in this report, it nonetheless meets the definition. Sanctions in the form of higher taxes are imposed automatically on identified entities where prescribed results are not achieved. Fla. Stat. 373.4592.

Other states have chemigation laws. While many of these chiefly require installation of certain safety equipment to prevent malfunctions, others include provisions more directly linked to water pollution. Colorado, for example, requires a permit for addition of agricultural chemicals to irrigation water, and authorizes the commissioner of agriculture to suspend or revoke permits if the operation has contaminated surface or groundwater. Colo. Rev. Stat. 35-11-103, 35-11-112.

Various uses of BMPs in "enforceable mechanisms"

In the context of both forestry and agriculture, states have in many different ways contrived mechanisms to make BMPs either enforceable or at least something more than voluntary by linking them to other enforcement mechanisms. There are at least five such approaches. Some laws, such as state comprehensive forest practices laws, make BMPs directly enforceable in connection with required plans and permits. Another approach makes BMPs enforceable, but only after the fact when a "bad actor" is causing pollution. A third approach makes BMPs the basis for an exemption from a regulatory program. For example, a law may provide that compliance with BMPs will allow a forestry operation not to need a permit under a critical areas program, or a farm not to comply with an erosion and sediment control law. Another approach makes compliance with BMPs a defense to a regulatory violation; such provisions include those that prohibit a state from taking action under a water pollution control statute against a farm that is implementing BMPs, whether or not the operation is causing pollution. Finally, a substantial number of states make compliance with agricultural BMPs a defense to nuisance actions. These concepts are illustrated by a representative sample of laws below.

Directly enforceable BMPs come in a variety of laws that may apply broadly across the state, to limited geographic areas, or to specific activities. Kentucky makes agricultural BMPs mandatory where prescribed by the statewide plan to control such pollution. Georgia law requires BMPs for all land disturbing activities, but excepts certain activities altogether. Arizona specifically makes BMPs enforceable in a general permit applicable to "regulated agricultural activities," defined as the application of nitrogen fertilizer and concentrated animal feeding operations. Idaho and Oregon, among other states, require implementation of BMPs under their forest practices laws. Other state laws make BMPs enforceable in particular places needing additional protection. For example, Connecticut requires agricultural operations in aquifer protection areas to implement BMPs. Maryland requires BMPs for forest operations in nontidal wetlands. West Virginia law provides that BMPs may be made enforceable for fertilizers and manures if the commissioner of agriculture identifies a significant groundwater problem. Florida requires them for the Everglades protection region.

A few states have provisions that make BMPs enforceable against bad actors - those who are responsible for actual pollution or nuisance conditions. This is true of the bad actor laws previously discussed, such as the Delaware and Virginia forestry laws. But it is not limited to these laws. Maine, for example, provides that if water pollution is being caused by a farm or farm operation not using BMPs, the commissioner of Agriculture, Food and Rural Resources shall direct the operator to implement BMPs; if they are not implemented, the Attorney General may institute an action for abatement. 17 Maine Rev. Stat. Ann. 2805. New Hampshire's law offers a weaker version, authorizing its commissioner of agriculture only to notify local health departments or the state department of environmental services "who shall take such action as their authority permits" if BMPs are not followed.

Exemption from regulation is an approach usually designed to avoid doubly regulating activities such as agriculture or forestry. In New Hampshire forestry operations following BMPs are not subject to "alteration of terrain" permitting under N.H. Rev. Stat. Ann. 485-A:17:III; similarly agricultural activities are exempt from the state's comprehensive shoreland law if conducted in conformance with BMPs. N.H. Rev. Stat. Ann. 483-B:3.III. In Virginia, forestry operations in jurisdictions subject to the Chesapeake Bay Protection Act are exempt from the requirements of that act if they follow forestry BMPs. 9 Va. Admin. Code 10-20-120. In North Carolina activities conducted in accordance with Forest Practice Guidelines Related to Water Quality are exempt from the state's Sediment Pollution Control Act. N.C. Gen. Stat. 113A-52.1.

Other state laws apply regulatory laws to nonpoint source activities, but make the implementation of BMPs a defense to an enforcement action charging a regulatory violation. Georgia's Erosion and Sedimentation Act provides that "proper design, installation, and maintenance" of urban BMPs (agriculture is not regulated under this program) is a complete defense to any action by the Environmental Protection Division. Oregon's Forest Practices law provides that forest operators operating in accordance with BMPs "shall not be considered in violation of any water quality standards." Ore. Rev. Stat. 527.770. Maine law provides that any method of operation used by a farm may not be considered a violation of any municipal ordinance if it is a BMP. 17 Maine Rev. Stat. Ann. 2805. The law also provides that an operation cannot be deemed in violation of Maine's general discharge prohibition if the operation is implementing practices in accordance with a plan approved by the appropriate soil and water conservation district. 38 Maine Rev. Stat. 413(2).

Vermont law illustrates a different approach to the regulatory defense role for BMPs. Its law provides that a farmer implementing "accepted agricultural practices" is presumed to be in compliance with water quality standards; however the presumption may be rebutted by the state in an enforcement action. 6 Vt. Stat. Ann. 4810. Kentucky also establishes a presumption; a person engaged in agricultural operations, including silviculture, in a water priority protection region where pollution has been documented "shall be presumed in compliance" where BMPs have been implemented as required by plan. Ky. Rev. Stat. 224.71-120(9).

Some states apply BMPs as a regulatory defense to particular requirements. For

example, 7 Del. Code 6037(b) exempts farmers from replacing a person's damaged drinking water supply if the supply was damaged by "bacteria, viruses, nitrate, or pesticides, which have been applied" by the farmer according to the manufacturer's instructions. Fla. Stat. 576.045(4) exempts farmers using BMPs from liability for replacing water supplies damaged by nitrates. Iowa and Idaho have similar provisions that exempt farmers from liability for cleanup or for damages to groundwater. Iowa Code 455E.6 (no liability for cleanup or damages to groundwater from nitrates if application followed soil test results and fertilizer label); Idaho Code 39-127 (no liability for groundwater contamination from fertilizer if applied per generally accepted agronomic practices, or contamination from a pesticide if applied in compliance with law). Delaware and Virginia, as noted above, do not allow the state forestry agency to issue a "special order" if BMPs are in use and "unusual weather" caused the pollution event. 7 Del. Code 2980; Va. Code 10.1-1181.2. Pennsylvania law provides that management in accordance with a nutrient management plan requires mitigation or exemption from pollution penalties otherwise applicable. 3 Purdon's Stat. 1712, 1713.

As noted in the discussion of nuisance laws in chapter two, most states offer farms some protection against certain kinds of public or private nuisance suits. While these protections often do not apply to pollution caused by farms, a number of states have enacted laws that make compliance with BMPs a defense to nuisance actions. For example, Mich. Cons. L. 286.473a provides that the state's Department of Agriculture gets the first opportunity to investigate an alleged agricultural nuisance including "complaints involving the use of manure and other nutrients...and surface- or groundwater pollution." If the Department determines that BMPs are in use, then it must notify the complainants that proper practices are in effect. If they are not in use, then the department can "advise" the farm operation to resolve the problem. Variations on such laws as a supplement to the typical "right-to-farm" nuisance exemptions, exist in a number of states including Ohio, Maine, Vermont and others. Maine's law provides that "A farm or farm operation may not be considered a public or private nuisance if the farm...conforms to best management practices as determined by the Commissioner of Agriculture, Food and Rural Resources." 17 Maine Rev. Stat. 2805. Ohio makes BMPs an "affirmative defense" to a nuisance action. Ohio Rev. Stat. 1511.021.

Pesticides

Almost all states provide for state registration of pesticides and licensing or certification of dealers and commercial applicators (sometimes divided into classes or categories) requiring examinations and continuing education. A typical example is Georgia Rev. Stat. 2-7-99. These provisions are intended to help prevent the misuse and misapplication of pesticides. Most state laws requiring applicator licenses or certificates exempt farmers applying general use pesticides to their own property or that of neighbors noncommercially (e.g., Georgia Rev. Stat. 2-7-100; Ky. Rev. Stat 217B.180).

Many state laws also give the state agency (usually an agriculture department) power to prohibit or restrict uses of particular pesticides in places where they may do damage or harm (e.g. Ky. Rev. Stat. 217B.050; Kansas Stat. Ann. 2-2472 - "pesticide management areas" with special BMPs).

Some states have broader provisions that can address harm from pesticide handling and application. For example, several states have laws like that of Massachusetts: "No person shall distribute, *handle*, dispose of, discard, or store any pesticide...in such manner as...to cause damage to the environment, or to pollute or contaminate any water supply, waterway, groundwater or waterbody" 132B Mass. Gen. L. 6. Compare Minn. Stat. 18B.07, subd. 2 ("*use*, store, handle, distribute or dispose of..."). These provisions contrast with the more typical state limitations that do not address pesticide handling or use, but only incidental contamination resulting from other activities in the distribution chain. For example, most state laws provide that "No person shall transport, store, or dispose of..." R.I. Gen. L. 23-25-19; 7 Del. Code 1235 (same), Georgia Rev. Stat. 2-7-106 (similar).

Some states have additional provisions that are intended to deal with drift and unintentional misapplication of pesticides into waters or adjacent properties. Fla. Stat. 487.031 prohibits "apply[ing] any pesticide directly to, or in any manner caus[ing] any pesticide to drift onto, any person or area not intended to receive the pesticide." 7 Pa. Admin. Code 128.103(c) "An application of a pesticide may not be made where weather conditions are such that it can be expected that the pesticide will move off of the proposed application site." Other states have monitoring and response programs that impose enforceable obligations where contamination of groundwater is shown. For example, Michigan provides authority to regulate, require an action plan for approval, and take other actions to deal with contaminated groundwater. Mich. Cons. L. 324.8323 - 8324. Nebraska and Montana have similar provisions for nutrients and similar contaminants. On the other hand, some states have enforcement exemptions. Georgia law provides that no one engaged in "agricultural, silvicultural, farming, horticultural, or similar operation...who has applied or used or arranged for the application or use of any fertilizer, plant growth regulator, or pesticide...shall be responsible or liable under this title, without proof of negligence or lack of due care, for any damages, response costs, or injunctive relief relating to any direct or indirect discharge or release into, or actual or threatened pollution of, the land,

waters, air, or other resources of the state...associated with or resulting from such application or use." Georgia Rev. Stat. 2-7-170(a).

Grazing and Irrigation

Apart from the nutrient management laws discussed above, little state law addresses grazing activities on private lands with respect to the possible impacts of increased runoff on water quality. Puerto Rico has a law that provides that "cattle or horses shall be...watered only at the place set aside for this purpose" 12 P.R. L. Ann. 803. Arkansas has an old law which has conceivable utility for nonpoint purposes. It provides that in counties bordering on navigable streams, a local court may upon petition of a majority of voters, order livestock to be fenced in. Ark. Code Ann. 14-387-201. Cal. Health & Safety Code 116990 and 116995 prohibit livestock from polluting waters used for domestic water supplies, a law potentially broad enough to deal with impacts in certain watersheds. Nevada has a similar provision. Nev. Rev. Stat. 568.330. In 1997, Arizona enacted a law requiring the state department of environmental quality to adopt, by rule, a "surface water quality general grazing permit consisting of *voluntary* best management practices for grazing activities." Because it requires a permit this provision is arguably enforceable, but the insertion of the word "voluntary" may well pose impediments to any actions beyond requiring a grazier to have such a permit. The regulations are to be adopted within 180 days after receiving the recommendations of a state BMP advisory committee; the law also provides that the director of the department may waive VBMPs in an area if existing grazing activities "will not cause a violation of the adopted water quality standards for navigable waters." Ariz. Rev. Stat. 49-202.01,.02.

Irrigation return flows are excluded from the definition of point source under the federal Clean Water Act. In general, state laws are not capturing conduct not addressed by federal law in this area. Apart from state laws dealing with chemigation (the addition of nutrients or pesticides to irrigation water) there is little state legislation imposing requirements on possible nonpoint impacts of irrigation itself. Nevada law explicitly makes irrigation return flows subject to regulation as a "diffuse source" where there is a demonstrated negative impact on water quality. Nev. Admin. Code 445A.309(1). Texas, like several other western states, provides for licensing of irrigation installers and other like measures, but goes further by providing for reasonable ordinances to protect a water supply. Vern. Tex. Code Ann., Water Code 34.014, 38.006. New Mexico Stat. 74-6-4(K) bars the state from placing a permit requirement on the use of water in "irrigated agriculture, except in the case of employment of a specific practice in connection with such irrigation that documentation or actual case history has shown to be hazardous to public health or the environment."

Chapter Four.



Other Issues

This chapter briefly addresses enforceable mechanisms with respect to a number of nonpoint source activities not covered in the preceding chapters. These categories of activities are important to water quality, but are summarized rather than discussed in detail.

ONSITE SEWAGE DISPOSAL SYSTEMS

Onsite sewage disposal systems (septic tanks) are usually locally regulated by building codes and health officials. However, a significant number of states have adopted requirements at the state level and delegated administration to local governments. Only a small number of the state laws explicitly require the owner to maintain the proper functioning of the system. There are often special requirements in coastal areas for the construction and maintenance of such systems.

While most states require licensing for pump-out operators, a significant number of states require licensing of installers and repairers of such systems, e.g., N.H. Rev. Stat. Ann. 485-A:36; 7 Del. Code 6023; Fla. Stat. 361.0064; Ky. Rev. Stat. 211.357, .360 (exempting farmstead owners, 211.350); Miss. Code 41-67-1 to -31; S.C. Code 44-1-140(11), R. 61-56.1, Vern. Tex. Code Ann. Health & Safety 366.012; Colo. Rev. Stat. 25-10-108 (local boards may require); S.Dak. Codified L. Ann. 34A-2-108; Cal. Health & Safety Code 117400. This list is not comprehensive and does not include requirements imposed by states under regulations rather than required by statute.

Numerous states have regulations for the siting and installation of onsite systems including, in many cases, permit requirements (e.g. Connecticut, Maine, Florida, Oregon, and many others). In many instances this authority is delegated to local governments. Other states directly authorize local governments or boards of health to impose permit requirements (e.g., New Jersey, Georgia, etc.). Still other link such regulation to the issuance of building permits. Some have cross-compliance provisions; for example, South Carolina prohibits a public utility from providing electrical service until proof of compliance with onsite sewage disposal requirements has been provided.

Apart from siting requirements - which may simply involve soil testing, but which in other states may include buffer zones and other requirements - a number of states have explicit provisions requiring land owners to maintain the functioning of their systems and to abate any pollution caused thereby. For example, New Hampshire law provides that "Any person who has installed or otherwise acquired a subsurface sewage or waste disposal system installed in accordance with [this law] is required to operate and maintain said system in such a manner as

to prevent a nuisance or potential health hazard due to failure of the system." N.H. Rev. Stat. Ann. 485-A:37. Missouri law provides that "no person shall operate an on-site sewage disposal system in a manner that may result in contamination of surface water or groundwater," Mo. Rev. Stat. 701.029(1), but the law exempts single family systems on parcels over three acres if the effluent does not leave the property. Mo. Rev. Stat. 701.31.

Rhode Island's rules require that systems "shall be maintained in good repair by the owner." R.I. Rule SD 2.11. Tennessee combines the siting and maintenance requirements succinctly in its legislation, which provides that subsurface sewage disposal systems shall be located, constructed and maintained so that wastes discharged to or from them do not pollute or contaminate surface or groundwater. Tenn. Code 68-221-401. There are often special requirement for maintenance and repair of systems adjacent to particular waterways, such as Washington's provisions for repair of failing systems adjacent to marine waters, Wash. Rev. Code 90.48.264.

Nevertheless, because so much regulation of these systems is entirely local, it is difficult to determine, by assessing state laws, what operating requirements are applicable to most onsite systems in use across the country.

HYDROMODIFICATION ACTIVITIES

The study identified numerous authorities related to earthmoving, construction, and maintenance activities in or adjacent to waterbodies. Most states require permits, either independent of or linked to Clean Water Act § 404 permits, for certain activities to alter waterways, or to maintain prior drainage ditches, dams, or diversions. In some cases these permits provide a means of assuring that these activities are conducted in ways less likely to cause nonpoint source pollution. This section briefly summarizes these requirements; however, full exploration of the implications of these authorities for nonpoint source water pollution would require a much more extensive analysis.

Such permit programs fall into basically five general categories: stream alteration permits, regulation of agricultural drainage activities, dam safety and operation, state wetland permitting, and floodplain regulation. In general, stream alteration laws require state permits for activities directly affecting the flow of, or calling for work in, the waters of the state. They often overlap with § 404 permitting, and those states that lack specific stream alteration permit authorities can still use § 401 water quality certifications under the Clean Water Act to affect impacts on water quality.

Agricultural drainage laws are most common in the midwest and plains states. Typically they contain no environmental provisions, but are subject to some environmental review under other programs, including stream alteration programs and § 404. A few contain provisions that directly limit activities that would result in increased levels of pollution, or that require review by state wildlife and fisheries agencies. (e.g. Utah Code Ann. 73-5-9). All states have laws addressing the construction and operation of dams, usually above a certain threshold size. While these laws are primarily directed at ensuring safety for the public, a number contain provisions that allow the state to order releases of water or retention of water for the benefit of water quality and aquatic organisms.

Wetland permitting has been referred to above. Many states have laws that provide detailed requirements for work conducted in tidal or nontidal wetlands. Many of these have adopted regulations specifying the use of forestry and agricultural BMPs, permit requirements, prohibitions of certain activities and other enforceable requirements. These programs overlap to some extent with § 404 permitting, but often cover activities in or near wetlands that are either not regulated under the federal act or that would be permitted by a general permit under that act (based on the size or nature of the activity).

Floodplain regulation is primarily local and designed to qualify for participation in federal flood insurance programs, often subject to state approval (e.g. N.Y. Env. Cons. L. 36-0101 to -0113, Cal. Water Code 8400-8412, Ohio Rev. Stat. 1521.18). Some states provide for state-level regulation of activities in floodplains (e.g. 131 Mass. Gen. L. 40A). Some of these floodplain laws and programs provide authority to limit or control nonpoint source pollution. For example, Indiana's Flood Control Act makes it unlawful to make any deposit or excavation in a floodway without a state permit from the Department of Natural Resources, and such a permit may be granted only if the activity will not result in "unreasonable detrimental effects upon fish, wildlife, or botanical resources." Ind. Code 14-28-1-22. Some laws also have direct prohibitions on depositing contaminants within the floodways. (e.g. Indiana Code 14-28-1-27).

In sum, laws addressing hydromodification and activities in floodplains and floodways can play a role in enforceable controls for nonpoint source pollution.

HIGHWAYS AND GOVERNMENTAL ACTIVITIES

Highways can be a significant source of nonpoint pollution, both during their construction and during their operation and maintenance. State laws contain little on nonpoint requirements for highways, except to the extent to which construction activities are made subject to statewide erosion and sediment control laws.

Although there is little in most state statutes, there are often enforceable controls established by contract requirements incorporating state manuals and specifications. Moreover, the federal Intermodal Surface Transportation Efficiency Act requires compliance with erosion control guidelines in highway construction funded with federal dollars. Although most of the requirements are not found in laws, some states do have provisions in law that indicate the kinds of requirements that can apply. For example, West Virginia has rules specifically requiring preparation of a pollution control plan and conformance to the "West Virginia Department of Highways Erosion and Sediment Control Manual." 157 W.Va. CSR 3-8.21 South Carolina is unusual in that its legislation addresses the topic explicitly. S.C. Code 63-380(1) requires that state Department of Transportation land disturbing activities be performed "in a manner that erosion is controlled and sediment is retained on the site concerned to the maximum extent feasible and stormwater is managed in a manner such that neither any significant on-site nor off-site damage and/or problem is caused or increases." S.C. Code 63-380(6) further specifies that maintenance have as "top priority...to take the necessary steps to insure the continuance of proper erosion and sediment control and stormwater management measures as may be needed to prevent on-site and off-site damages or contamination of watercourses or impoundments."

The other area of common interest in nonpoint discharges from highways is the discharge of road salt and related chemicals into the waters of the state. While many states have requirements for salt storage areas, Minnesota law further provides that in order to "reduce the pollution of waters" road authorities "shall utilize such salt and other chemicals only at such places as upon hills, at intersections, or upon high speed or arterial roadways where vehicle traction is particularly critical" and only if in the opinion of the road authorities, other means of snow removal or ice reduction such as plowing "cannot be accomplished in a reasonable amount of time." Minn. Stat. 160.215. While enforceability of this requirement is not clearly provided for, it is unique in setting an operational standard at all in law.

Enforcement of nonpoint source requirements against state agencies under state laws is not always clearly provided for. State environmental agencies may have enforcement powers where discharge limits or explicit provisions of erosion and sediment laws have been violated, but difficulties may be presented by the state "enforcing" against itself. And violations of construction manuals may be impossible to remedy absent a legislative handle, except for enforcement by state DOTs against their own contractors for breach of contract requirements. New York has enacted an interesting provision to attempt to deal with issues of this kind through disclosure and reporting. Its law provides that each state agency "shall annually audit the environmental problems created by its operations or the operation of contractors it has hired and over whom it has exercised or is required to exercise direct oversight." The agencies are required to report to the Department of Environmental Conservation each year on results, violations, and environmental threats posed by these activities. N.Y. Env. Cons. L. 3-0311.

State environmental policy acts in about a dozen states provide opportunities for prospective review of state actions that may produce nonpoint source pollution. Some of these laws, including those of California, Washington, and Massachusetts expressly require

implementation of identified mitigation measures and minimization of adverse environmental impacts.

Chapter Five:
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Conclusions

This study reveals that the states have a wide array of enforceable mechanisms for the control of nonpoint source water pollution. Virtually every state has a general discharge provision that is potentially applicable to nonpoint source discharges -- provided that the evidence of "pollution" or discharge of the statutorily defined substance can be obtained.

Some states have adopted complex and detailed enforceable programs dealing with certain economic activities or particular waterbodies. Some states have regulatory requirements prescribing operational requirements for agriculture or forestry or other activities, while others impose such requirements only for impaired waters. Still other states have only general discharge prohibitions. States have delegated much of the relevant enforcement authority to local units of government and conservation districts.

In addition, many of the most prescriptive laws are targeted to particular watersheds, water bodies, coastal zones, scenic rivers, or areas of special interest or concern. Thus, states have chosen to impose variable obligations across their jurisdictions based on the legislature's level of concern or identification of the importance of particular resources.

For example, Virginia's Chesapeake Bay Preservation Act requires local governments "to adopt water quality protection measures into their comprehensive plans, zoning ordinances, and subdivision ordinances." Va. Code 10.1-2100. Maryland's law has even more detailed requirements for buffer zones, land use controls and other provisions. Md. Code Ann., Nat. Res. 8-1808. New York's wild and scenic rivers law authorizes that state to make and enforce land use regulations to protect the river resources including water quality and fisheries. N.Y. Env. Cons. L. 15-15-2701.

Such targeted authorities may be broad, as well -- applying not just to designated bodies of water such as the Chesapeake Bay or legislatively-identified rivers, but also to classes of waters. For example, Maine provides for mandatory shoreline zoning that limits activities within 250 feet of the highwater line of any great pond, river, saltwater, or wetland, and within 75 feet of a stream. 38 Maine Rev. Stat. 435. Similar requirements are found in New Hampshire's Comprehensive Shoreland Protection Act, N.H. Rev. Stat. Ann. 483-B, including limitations on excavations, buffers for the application of fertilizers, woodland buffers with tree retention standards, minimum setbacks for septic systems, and other provisions. State wetlands programs can perform similar functions. About half the states have enforceable authorities tied to specific water bodies.

The states' primary responses to nonpoint source pollution -- the planning, incentive,

publicly funded, and voluntary programs -- are beyond the scope of this report. Yet in order to understand the role of enforcement in any particular state, understanding the reach and scope of these authorities is often quite important. For it is these programs which, in most cases, supply the operating standards for which enforcement - in most states - serves as a back-stop. Where state enforcement authorities are solely linked to particular breakdowns (as in the case of bad actor laws), or require the state to provide financial aid in order to issue an enforceable order, or require proof that a particular discharge "caused" a violation of water quality standards in the receiving waters, enforcement authorities alone may be insufficient to assure prevention of pollution; the prevention aspect is handled through voluntary programs. But state enforcement authorities linked to operating requirements, as in forest practices laws, erosion control plan requirements, and some agricultural and nutrient management operating requirements, provide for enforceable prevention and response obligations in an integrated way. Either approach may work, but the former requires careful integration of the enforcement and voluntary programs if prevention is the goal.

Federal decisionmakers can assist in the development of state enforceable authorities by undertaking studies of the effectiveness of these authorities in particular watersheds and with respect to particular impaired waters. As this study makes clear, the array of mechanisms applicable varies significantly not only state by state, but watershed by watershed, and activity by activity. Comparisons among approaches along different waterways, or enforcement studies based on the authorities available in particular places can greatly inform the federal process. Federal policymakers should also be aware of the effects of federal actions in the area of nonpoint source regulations. As described in the Appendix, a number of states have enacted laws which may produce unintended consequences if there is federal regulation in this area.

Finally, where water quality improvement is needed and voluntary programs are no longer sufficient, it is now possible to identify enforcement responses. This study reveals the types of authorities that states are already using in these situations, and the kinds of responses that either the states or the federal government could use in filling the identified gaps.

Appendix:



State "No More Stringent" Laws

An issue of potential relevance, particularly for the future adoption of enforceable regulations for nonpoint source control, is that of legislative limitations on regulatory actions by state agencies. About 1/3 of the states have statutory provisions that limit or condition the ability of their regulatory agencies to adopt regulations that are more stringent than any federal environmental regulations.

In general, these state laws do not impede the state agencies from regulating areas or practices that are not federally regulated at all. Where they pose some concern is where a federal regulation addresses an area only in part, or establishes a discharge limit of some kind. These provisions may, for example, make it more difficult for some state agencies to extend stormwater regulation beyond the requirements of the federal program to reach smaller or rural sources. Or they may make it difficult for a state to adopt or maintain comprehensive nonpoint source regulations if the federal government enacts legislation or promulgates regulations in the area establishing only rudimentary requirements.

The most problematic are state laws that prohibit adoption of any state rules that are more stringent than federal requirements that cover "an essentially similar subject or issue." S.Dak. Cod. Laws. Ann. 1-40-4.1. This kind of provision might impair a state's ability to expand upon CAFO or municipal stormwater regulations, or to regulate at all in an area where the federal program exists but is entirely voluntary. One of the most restrictive laws in this context is that of Idaho, where it is the "intent of the legislature" that the rules adopted by the state environmental agency in the water pollution control area "...not impose requirements beyond those of the federal clean water act." Idaho Code 39-3601.

Montana does not prohibit such rules outright, but prohibits rules "more stringent than the comparable federal regulations or guidelines that address the same circumstances" unless there is a finding after public hearing and detailed study that such rules are necessary. Mont. Code Ann. 75-5-203, -309, 80-15-110.

Most of the state law provisions on greater stringency do not prohibit such provisions, but rather require a more detailed and complex set of justifications and more procedural review if the state intends to adopt more stringent regulations than the federal requirements. For example, Maine requires the state DEP to identify rules that are more stringent and to justify them, and provides for a longer review period. 38 Maine Rev. Stat. Ann. 341-D. Florida has a similar provision, and further requires approval by the governor and cabinet after review of a cost benefit analysis. Fla. Stat. 403.061(7)(31), 403.804(2). Pennsylvania has a similar requirement under Executive Order 1996-1, requiring a "compelling and articulable"

Pennsylvania interest in the deviation or an independent state legislative justification. Maryland has similar provisions in an Executive Order, as does Wisconsin under a Natural Resources Board Policy. Board Pol. 1.52(3). Utah has enacted a similar legislative requirement. Utah Code Ann. 19-5-195. Ohio requires more disclosure and review for such regulatory proposals, including more disclosure for proposed legislation that may be more stringent than federal requirements. Ohio Rev. Stat. 121.39.

Mississippi Code 49-17-34(2) provides that: "All rules, regulations and standards relating to..water quality...or water discharge standards promulgated by the commission after April 16, 1993 shall be consistent with and shall not exceed the requirements of federal statutes and federal regulations, standards, criteria and guidance...that have been duly promulgated pursuant to the federal Administrative Procedures Act, including but not limited to...the identity and scope of water pollutants included as water quality or discharge standards and the numerical and narrative limitations of such standards." However, the commission is allowed to promulgate regulations in the absence of federal standards "when the commission determines that such regulations are necessary to protect human health, welfare or the environment." Miss. Code 49-17-34(3).

A separate provision, Miss. Code 69-23-109, requires the Commissioner of Agriculture and Commerce to report to the legislature any regulation of pesticide applicators that is "more restrictive than applicable federal regulations" but does not prohibit or impose special procedural requirements on such regulations.

Other state law limitations appear to be limited to effluent limits in NPDES permits and so less applicable to most nonpoint regulations. Kentucky Rev. Stat. 224.16-050 provides that the Department of Natural Resources and Environmental Protection may not impose under any permit "any effluent limitation, monitoring requirement, or other condition which is more stringent than...would have been applicable under federal regulation if the permit were issued by the federal government." North Carolina law provides that "Except as required by federal law or regulations, the [Environmental Management] Commission may not adopt effluent standards or limitations applicable to animal or poultry feeding operations." N.C. Gen. Stat. 143-215. Iowa law provides that no state effluent standard may be more stringent than a federal effluent standard; but the law also declares explicitly that the state may establish such standards for

sources or classes of sources for which the federal EPA has not done so. Iowa Code Ann. 455B.173.

Finally, Oregon law bars the state Environmental Quality Commission and DEQ from "promulgat[ing] or enforc[ing] any effluent limitation upon nonpoint source discharges of pollutants resulting from forest operations on forestlands" unless mandated under the federal Clean Water Act. Ore. Rev. Stat. 468B.110(2).

In sum, federal decisionmakers need to be aware of these self-imposed state limitations when they make decisions about legislating or rulemaking in the area of nonpoint source water pollution controls.